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Vol. I October, 1930 No. 8

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HEALTH *and* PHYSICAL EDUCATION

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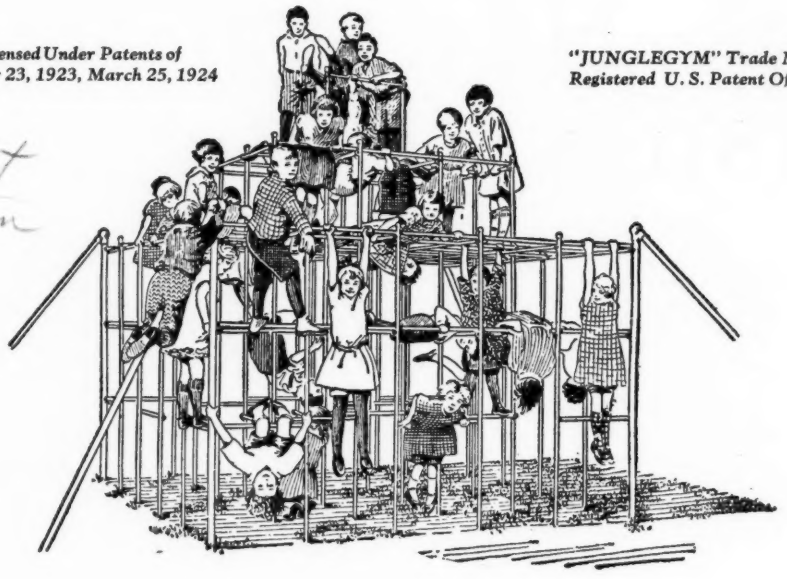

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The New Physical Education in Germany

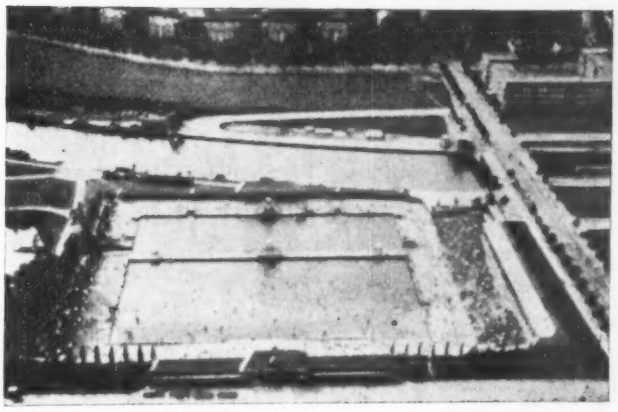
By

FREDERICK H. WOHLERS

Department of Physical Education,
Union Free District No. 1
Scarsdale, N.Y.

ABOUT a century and a quarter ago the German people began a long, arduous struggle upward from defeat in war. Today, in Germany, history is repeating itself. Under a new form of government, the nation has begun to erect and strengthen new standards and ideals with which to face the future. It was quickly perceived that the growing generation must be strongly fortified both physically and mentally to shoulder successfully the burdens soon to be thrust upon them. Physical education, therefore, is again being utilized to revitalize the physical forces of a people bled white in a great war. There has emerged no single guiding figure, as Father Jahn of glorious memory, but there apparently is, in his stead, an entire youth accepting physical activity as an escape from the depression and despondency of post-war conditions.

To the visiting physical educator, this trend toward expression through physical activity is unquestionably the most arresting note in German life. Where a routine, one-two-three-four type of system once ruled there is now a restless groping toward methods more dynamic, more interesting and self-expressive. Throughout Germany is evident a heightened interest in all types of physical activity. Political parties count athletic clubs as an essential part of their organization, cities are building magnificent stadiums for public use, on the roads countless groups of young people are hiking, while the Rhine, Saal, Elbe, and other rivers carry sportboats up and down their entire length. Bicycling and swimming are accomplishments of every youth. Newspapers, sure indicators of what interests the public, are full of items pertaining to athletics and sport, while printed matter in this field has, roughly, quadrupled in volume since the war. Behind this activity lies a spirit of self-realization, a flame kindled and fostered years before the war by the Youth Movement and now burning strongly in the new era of freedom. In addition, the attitude of the government is favorable to all measures that alleviate or combat the evil after-effects of the war on the physical life of youth and adult. In other words, a popular inclination for physical activity is receiving the approbation and direct support of governmental legislation.



PUBLIC BATHING ESTABLISHMENT, HAMBURG

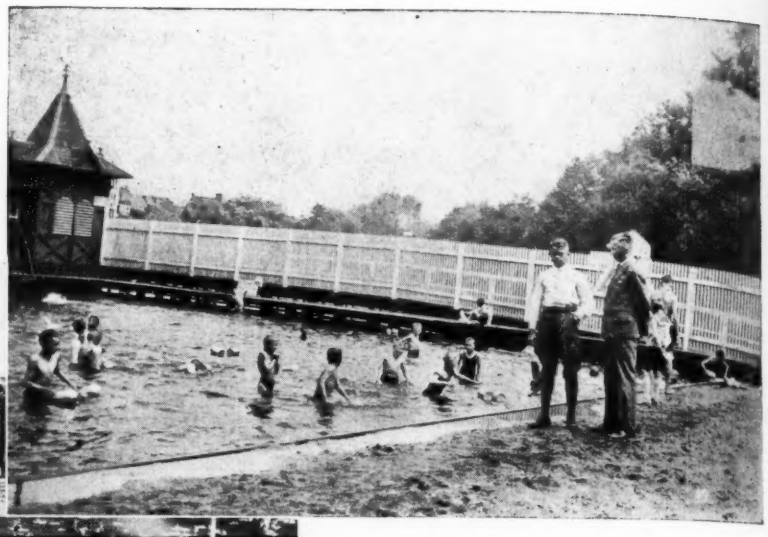
Physical Education in the Schools

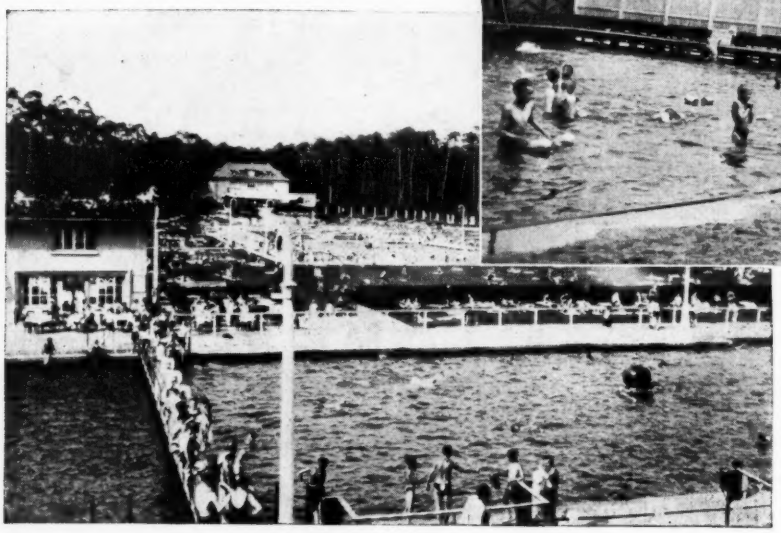
THERE is a conscious effort in educational institutions to bring color, joyousness, and a sense of security into the life of youth. Somewhere the boy or girl must have a chance to express his or her natural light-heartedness—somewhere the conditions must be such that optimism and activity free of worry and care shall flourish. This the schools, the great city stadiums, and the *Jugendherbergen* (shelters for the wandering youth) strive mightily to furnish. The general policy of physical education reflects this endeavor. Largely for this reason, the strict discipline of former years has gone by the board. Likewise, there is no attempt at classification for purposes of instruction. The class arrives as a whole, each individual feeling himself part of the group. The class is his particular school-family. Its strength is his; its weaknesses he also shares. Classification would destroy this idea of oneness, of solidarity, that the school wishes to create. It is this idea, also, that brings the class teacher out as the instructor in gymnastics, the leader in play, and guide during the days spent roaming in the fields and forests.

Physical education was established on a three-hour-a-week basis in 1910.[1] This was augmented by a weekly afternoon play period lasting usually two hours, and,

[1] Ministerial decree of June 13, 1910 U III B 6339 U III A. U III. U II. Applies to fourth grade and upward.

every fourth week, an entire day spent in wandering.[2] Later, by the Ministerial decree of June 24, 1924, there was instituted in the higher schools a four hour a week program, two hours of physical education and a compulsory two-hour play period in the afternoon. A few experimental schools within the





Above—A GROUP OF BEGINNERS BEING TAUGHT SWIMMING DURING SCHOOL HOURS.

Outdoor pool, first time for this class, Lübeck

Left—PART-VIEW OF SWIMMING POOL AT FRANKFURT STADIUM

last few years have been trying the one-hour-a-day plan. Of its results and possibilities, more will be said later. The addition of a few hours of physical education, however, is only incidental to the great change in the program content. The Ministerial decrees of Oct. 15, 1922 and June 1, 1925, ushered in an entirely new conception of the methods by which physical education was to attain its ends. Under the old régime, military tactics, heavy apparatus, and precise mechanical movements were the mediums of instruction. Today, it is rhythmical movements, light athletics, sport, and games. The aims, too, have changed. Today they are:

"Promotion of health, the entire physical development and efficiency through systematic strengthening of the important organs, nerves and muscles. Habitual good posture and light natural movements. Guidance to bodily care and hardening. Education to independence and self-command, to courage and perseverance, to self and social control, to public spirit and cooperation.

The program must be so given that the regular practice of physical activity will extend from the school years into a life habit, and become a popular national habit."[3]

Having increased the hours of attendance, and swept the military conception of physical education into the limbo of the past, attention was directed to the fulfilling of the new ideas. To insure proper teacher-appreciation of the benefits of physical education and later to secure intelligent teacher-cooperation, and in the belief that the teacher who is not active, vigorous, and outdoor-minded cannot, in the very nature of things, be a really helpful leader of the normal, healthy child, all teachers in training were required to take physical education. The converse of this appears in the regulation that special teachers of physical education must, before being granted a certificate, also pass examinations in one or two other branches of education, i.e. mathematics, history, etc.[4] This incidently opens the portals of the strictly academic world to physical educators, or, as one of the professors tersely put it, "Sie sind nun auch Philologen."

The Physical Education Period

THE physical education period is generally divided into two parts, one of ten to fifteen minutes in exercises for strengthening muscles and vital organs (Körperschule), the second of thirty to thirty-five minutes in performance exercises on the parallel bars, tumbling mats, etc., when inside, and in high-jumping, running, skiing, etc., when outdoors (Leistungsturnen). Military tactics, heretofore the *pièce de résistance* of a period in physical education, are entirely absent. During the first period, exercises are given to bring into play all the large muscle groups, strengthening some and stretching others. The movements are natural, flowing from one to another; seldom are they precise and "to the count." Relaxation is striven for; and, when action is needed, sure, graceful movement of the entire body is sought,. There are, to be sure, instances where the formal procedure still exists. One such case comes to mind in which exercises on the parallel bars, including the swinging, had to be performed to the count of the instructor. Such cases however, are rare; only three were observed in visiting twenty-six cities. In all three instances the instructors were steadfast

[2] Ministerial decree of March 29, 1920, applies to sixth grade and upward.

[3] Ministerial decree of June 1, 1925 U III D 2000.

[4] This provision applies also to those majoring in other branches of the teaching profession. Thus it happens that many choose physical education as a minor subject.

products of the old school. It is to be noted that, although the national council outlines the general course of action, the individual teacher has freedom in choosing his or her method of instruction.

THE retention of the *Körperschule* in the physical education period indicates that German physical educators are not convinced that sport and games alone will be sufficient to attain the aims toward which they are striving. While affirming that performance exercises must be a major objective, Dr. Neuendorff, director of the Prussian Hochschule for Physical Education, nevertheless cautions:

"However, we are no longer the primitive people of by-gone days, who were naturally and readily accustomed to strenuous exertion. Our race has gone through a long period of development, which has led from the natural way to the way of civilization. We all bring into the world, as an inheritance, therefore, many physical failings. Moreover, wrong habits of civilization hinder the physical development even of the child and bring about disturbances and unnatural strains. ...Such wrong habits...confront the youngster during his entire school life. To establish a counterpoise, it is not enough to watch painstakingly that no exercise is given that builds wrong physically or checks the growth of a strong constitution; there must be practiced many fixed exercises which...will tend toward correct physical growth and toward strengthening the constitution. We group these exercises together under the name Körperschule."[5]

Chemnitz, an industrial city, has found it profitable to give to each child leaving school to enter industry a small, well-illustrated booklet entitled "Daily Exercises." It has exercises for the chest, the back, the abdomen, the sides, etc., and it admonishes:

"You must exercise daily, even though you have left school. Yes, even more zealously, for this reason! Thereby, with the daily cleansing of your body, you render it the greatest service. Do the standing exercises in this pamphlet, which are still familiar to you from school, by yourself. It is best to do them in the morning, in loose clothing, before an open window."

Although sport, performance exercises, and games are emphasized in the program of German school physical education, it is apparently felt that "fixed" exercises also have an undeniable place, that they will contribute to joy and excellence in performance by systematically exercising all parts of the body from the earliest years onward, and that they fulfill an important role in building an erect, well-carried body.

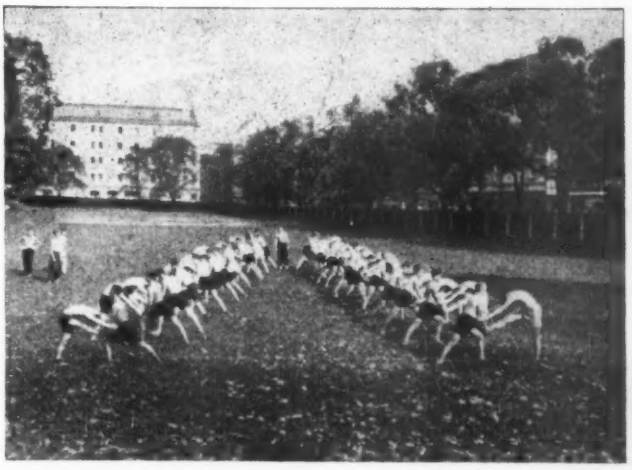
THE remainder of the period (Leistungsturnen) is spent in exercises demanding skill, judgment, and courage. Varying in difficulty for the various classes, exercises are set on the parallel bars, the horizontal bar, the rings, and the tumbling mat. Enough of the influence of the former Turnvereins remains to demand finished pieces of work, the kind once expected of the German gymnast. With the event of Spring, however, interest swings sharply to athletics—to running, high-jumping, shot-putting, javelin-throwing, and other events of track and field. Here, also, emphasis is put upon performance. Many schools have established a point-basis for grading the various events. Class ratings have also been established for swimming.

[5] Dr. E. Neuendorff—"Die Turnstunde in der Knabenschule," p. 12. Wilhelm Limpert Co. Dresden, Germany.

A period of physical education, consequently, provides for the normal growth and strengthening of the important organs and muscles of the body, the achieving thereby of an easy, correct carriage, and likewise affords opportunity for developing courage, perseverance, self-respect, and other social qualities inherent in activities in which students are interested and which call forth their utmost efforts for success.

The Afternoon Play Period

THE afternoon period of play corresponds to the intramural program in the United States. An organized schedule of games, however, does not appear. The students gather at the playground (school, public, or private),[6] and divide themselves into competing teams. The games generally favored are Schlagball, the German game of baseball; Handball, a species of soccer wherein the hands only are used; Faustball, a game corresponding to volleyball; Soccer; and Schleuderball, a game consisting simply of throwing a ball, approximately 4.5 pounds in weight, back and forth until it falls behind the goal line of one of the competing teams. Where facilities allow, rowing becomes an important afternoon activity.[7] Particular emphasis is laid upon the winter sports—tobogganing, skating and skiing. These



TEACHER TRAINING CLASS IN GYMNASTICS AND SPORTS

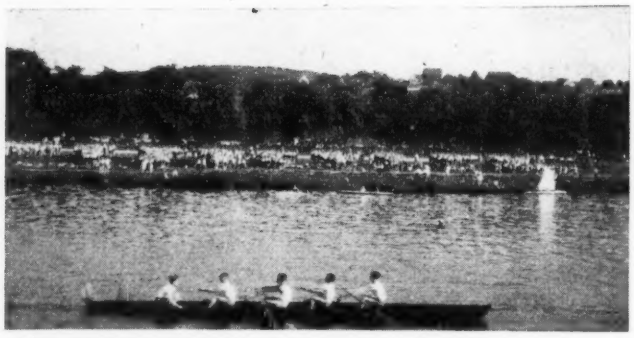
became so popular that in one large city a special training course had to be given for teachers. The enrollment in this course increased from 35 in 1925 to 200 in 1928.

Interschool Competition

INTERSCHOOL competition, involving varsity teams and prearranged schedules so prominent in our athletics, does not exist. School teams are often formed, however, to play representative teams of other institutions, presumably on an invitation basis. This type of competition is not lacking, for yearly there is held the *Reichsjugendwettkämpfe,* a series of athletic contests between local schools and athletic associations somewhat

[6] There is a close cooperation between public and private interests in providing facilities for sport, outside athletic organizations having the use of school property and vice versa.

[7] In Berlin, a city with splendid reaches of water, 106 schools have rowing clubs with 430 boats. Of these 30 are girls' schools.



BOAT RACE AND SPORT DAY (Other Side of River)
PROGRAM AT ESSEN

like the annual athletic meets of the Public School Athletic League of New York City. These national contests are open to young people from 11 to 18 years of age. Local athletic groups, city associations, and schools may participate together or competition may be limited to one type of institution. The former is usual in smaller towns, the latter in the larger cities. The object is to involve as many young people as possible. "The national junior contests should be a stimulus for the entire German youth to measure its ability in bodily exercise," says the national committee in its instructions for the 1929 *Reichsjugendwettkämpfe*.[8] The events are running, jumping, and throwing. Where facilities make it possible, swimming is included. Generally, also, the various teams compete on the horizontal bar and on the horse or parallel bars, uniting in a mass demonstration of free-hand exercises.

The three events, running, throwing, and jumping, have been scaled by the national committee. Each contestant is awarded whatever his time, heighth, or distance rates. The boy or girl accumulating forty or more points receives the title of "Sieger."[9] If swimming is added to the list of events, a Sieger must obtain at least fifty-three points. Where the heavy apparatus is likewise included, two judges rate the performance on the basis of ten, the contestant receiving the combined points awarded him by the judges. In this case, at least sixty-six points (if one piece of apparatus is used; eighty points if two) are necessary for the title of Sieger.

For the seventeen to eighteen year old group the following events, with scales for performance, are offered:

100 meter run (109.4 yds.)

16.3 sec.=0 points. Every 1/5 of a sec. less=1 point. 12.3 sec.=20 points.

Shot-Put

Six meters (19 ft. 8 in.)=0 points. Every 25 cm. (9.8 in.) more=1 point. 11 meters (36 ft. 1 in.)=20 points.

Broad Jump[10]

3.20 meters (10 ft. 6 in.) =0 points. Every 10 cm. (3.9 in.) more=1 point. 5.20 meters (17 ft. 1 in.)=20 points.

High Jump[10]

One meter (3 ft. 3 in.)=0 points. Every 5 cm. (2 in.) more =1 point. 1.50 meters (4 ft. 11 in.)=20 points.

Swimming

100 meters (109.4 yds.) In this event the average of the five best performances is given the rating of 20 points. Each 1½ seconds over or below adds or detracts one point. Where a regulation 50 meter pool is available: 150 seconds=0 points. Every 1½ seconds less=1 point. 120 seconds=20 points.

For girls of the same age group the following events, with point scales, are held:

75 meter (82 yd.) run

15 sec.=0 points. Every 1/5 second less=1 point. 11 seconds =20 points.

Shot-Put (weight 8.8 lbs.)

3.60 meters (1 ft. 10 in.)=0 points. Every 20 cm. (7.9 in.) more=1 point. 7.60 meters (24 ft. 11 in.)=20 points.

Broad-Jump[11]

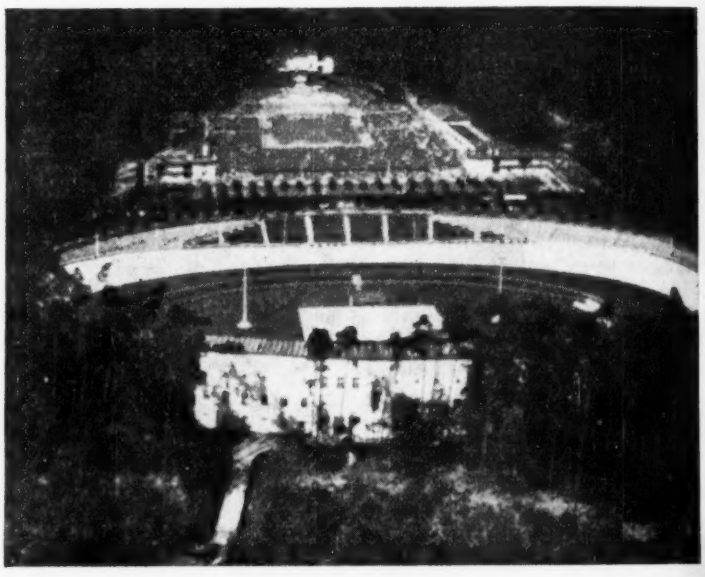
1.85 meters (6 ft. 1 in.)=0 points. Every 10 cm. (3.9 in.) more=1 point. 3.85 meters (12 ft. 7.5 in.)=20 points.

High Jump[11]

0.85 meters (2 ft. 9.5 in.)=0 points. Every 5 cm. (1.9 in.) =1 point. 1.30 meters (4 ft. 3 in.)=20 points.

Swimming

50 meters. The same procedure for awarding points in swimming is followed as with the boys. For races held in a regulation 50 meter pool the following applies: 90 seconds=0 points. Every 1½ sec. less=1 point. 60 seconds=20 points.



STADIUM IN THE MUNICIPAL FOREST, FRANKFURT, a/M.

The highest award goes to the highest ten of one hundred Siegers.[12] This is a certificate of honor from the President of the German Republic.

For the Volkschule (elementary schools) contest in Düsseldorf, the scales were changed to conform to standards found more applicable for the children of this city. They start higher, and the maximum number of points has been raised to twenty-eight. The requirement for Sieger remains the same, forty points. Each school sends ten of its best boys to compete. The school scor-

[8] These are substantially the same as the instructions embodied in the decrees of May 22, 1923 (U VI 1341) and May, 1924 (U VI 366).

[9] Meaning "Victor." A girl is termed "Siegerin."

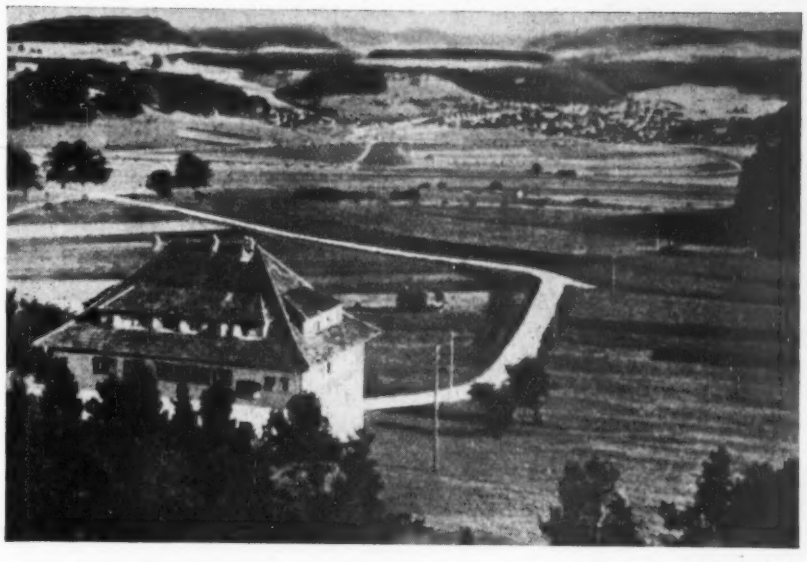
[10] Either broad-jump or high-jump is selected by the directors of the contest as the event measuring jumping ability.

[11] Either broad-jump or high-jump is selected by the directors of the contest as the event measuring jumping ability.

[12] If there are two hundred Siegers then twenty high awards are granted, etc.

ing the highest number of points receives a banner, upon which is inscribed the name of the winning school and the year the trophy was won. This the school holds for one year, surrendering it the next to the winner of that year.

The interesting points about the *Reichsjugendwettkämpfe* are the use of the fundamental human activities of running, jumping, and throwing as the basis for competition (establishing these therefore as the basis for training in the schools and athletic associations), the furnishing of car-tickets to those school children living a distance from the place of competition,[13] the simple awards reminiscent of the Greek games, and, to one accustomed to American contests, the comparative lack of outward signs of enthusiasm such as cheering, individual yells of encouragement, concerted movement toward the tape, and spontaneous outbursts at the finish of races.



YOUTH SHELTER, "SCHAUINSLAND," IN THE BLACK FOREST

In addition to the yearly national contests, there are local sport festivities and sport weeks. In these exhibitions all children may participate and all types of athletic activities are represented. The characteristic running, throwing, and jumping contests (Dreikampf), mass free-hand exercises, games, relay races, and exercises on heavy apparatus are all present. An interesting race was observed at one such Sport Week, in which emphasis was placed upon team rather than individual ability. In an 1800 meter run four boys were entered from each school. In order to win, three had to cross the tape hand in hand.

Swimming

The incorporation of swimming instruction in the school curriculum was widely desired and finally officially approved by Ministerial decree of May 3, 1924 (U VI 2765). Uniform regulation was impossible, however, owing to the wide variance in facilities (ranging from none at all to modern swimming pools) and to the differences in time that could be given to such instruction arising from the convenient or inconvenient situation of facilities. The decree, therefore, confines itself to stressing the desirability of including swimming in the physical education program, promising the cooperation of private bathing institutions, swimming associations, and military bathing establishments, and leaves to the individual institutions the often vexatious questions of administration.[14] Methods consequently differ throughout Germany. Generally, however, instruction is given to children eleven or twelve years of age,[15] and the breast-stroke is the stroke most favored. In some systems, participation is compulsory, in others optional. The tendency is toward making it obligatory. Even where it is optional, practically every child is inclined, for aside from the fascination of the sport, few fail to succumb to the insistence of their schoolmates and the advice of their teachers to enter the swimming class.

[13] Dusseldorf.

SITTING ROOM OF A YOUTH SHELTER, BURG ALTENA

The extensive campaign to teach all children how to swim has led to the devising and use of novel pieces of apparatus. One, for land purposes, looks much like an old fashioned saw-buck, one side shorter than the other, with the extending ends connected by straps. On this the boy lies and is free to go through the full coordinated movements of the breast-stroke. For the individual who does not readily learn in the water, there is the steel upright, to which is attached a projecting arm that can be swung over the water. From this is suspended a wide belt, which is placed under the

[14] As a consequence it was not until 1926 or 1927 that swimming was introduced into the majority of the schools.

[15] Unless excused by the school doctor.

chest while the pupil conquers the mechanics of the stroke. The most elaborate device provided for upholding a group of eighteen in the water simultaneously; the element of time was a large factor in this particular city, and the supervisor of physical education devised this ingenious method of expediting instruction. Over the shallow end of the pool, near the ceiling, were strung three stout wires, approximately two yards apart. Suspended from each, at equal distances across the pool but so spaced that they did not fall directly in back of the one in front, were six ropes ending in a length of chain and a wide belt. A catch at the lower end of the chain enabled the individual to lift or lower the belt to his own satisfaction by moving the catch a few links upward or downward. By means of pulleys the instructor was able, at the end of the period, to draw the entire apparatus to one side of the pool.

WHEREVER possible, instruction is given in open bathing establishments—in the rivers, lakes, or large public stadiums. In city systems not enjoying such facilities, classes are held in public or private swimming pools, the pupils being admitted free under arrangement with the municipal government. The individual boy or girl is usually given swimming lessons in his sixth school year, generally during the summer months, though, where indoor swimming pools are available, the instruction sometimes lasts through the winter months. All are taught the breast-stroke and the front dive. Those who already know the breast-stroke or who learn quickly, are taught other strokes and given lessons in life saving.

The problem of follow-up work is difficult, particularly for those who do not learn well enough to pass the test for "swimmer." It is expected that those who do pass will enjoy swimming sufficiently to frequent the public bathing places voluntarily. Provision for the others varies according to the available facilities. Where these are large enough, pupils not passing the test one year are included in the next year's group. Systems not so fortunately equipped cannot do this. One supervisor has thought of another way to provide his failing pupils with additional opportunity for practicing swimming. Each is given ten tickets for the swimming pool. Using these as he has leisure time, the student re-practices what he was taught during his periods of instruction. If, with the use of the tenth ticket, he can pass the swimmer's test he is given a certificate to that effect, and another ten tickets should he wish to try perfecting his other strokes.

A careful record is kept of the number of boys and girls taken under instruction, the number passing the test in the different swimming strokes, etc.

Orthopedic Gymnastics

THE program of orthopedic work has various degrees of thoroughness. In general, however, it enjoys a higher degree of respect in Germany than in America. As indicated previously, governmental and educational authorities are continually endeavoring to overcome the evil physical legacy of the war, strengthening in all possible ways the physical inheritance of their boys and girls. Orthopedic gymnastics come within this field of activity.

The school doctor, a member of the municipal medical staff, examines the children and indicates those needing special attention and exercise. This group is excused from the regular periods of physical education and given special periods under the physical educator with the school doctor as supervisor. Occasionally a division is made into serious and non-serious pupils, with the first group under the direct control of the doctor, the other remaining with the director of physical education. One city manages matters somewhat differently; here special teachers visit the various schools twice a week to conduct the orthopedic classes.

Not only is emphasis placed upon remedial measures, but the idea of prevention is everywhere present. Regular half hour periods of instruction in posture are given to the first two years in the primary school. And one function of the *Körperschule,* part of every period of physical education, is to develop proper body balance.

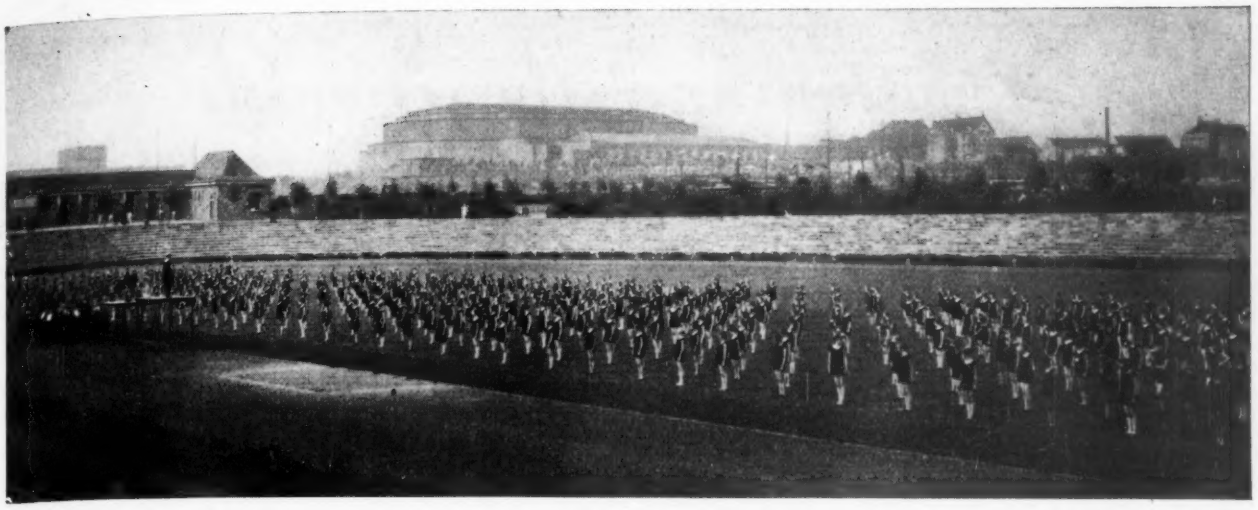
Wander-days and School Land-homes

A DISTINCTIVE feature of German physical education is the "Wander-day." This occurs eight, ten or twelve times during the year according to the individual school system. Occasionally two or three days are grouped together and a longer pilgrimage made into the country. In company with teachers, the children visit the surrounding country, learning its history, noting its position with reference to near-by cities, mountains, and rivers, and identifying trees, flowers, rocks and stars. These are the academic values attached to such trips. Of equal, perhaps greater, importance, is the fact that the youngsters are out in the open, welding closer bonds of comradeship among themselves and between themselves and their leaders, and using their bodies under conditions similar to those under which the race formerly developed. Seeing a group of these youngsters swinging along the road, dressed in hiking costumes, with knapsacks on their backs, singing a local folk-song, is a striking sight.

The cost of such trips is slight. To a large extent the food is brought by the student (particularly on one-day hikes). Trolley or railroad fare is greatly reduced. On hikes of longer duration, food and lodging are furnished at a very moderate price by the Youth Shelters, a network of which cover all Germany. Where necessary, the entire cost is paid by the municipality.

This desire to bring the youth back to the country has been a factor in the growth of the school land-homes. These are old country houses, inns, or occasionally newly-built structures, acquired by a school or a group of schools,[10] to which entire classes are sent for a period of two weeks or more. Regular school work is pursued

[10] In view of the stringency of money, it is interesting to know how some of these homes were obtained. Many were in the nature of gifts, some were bought during the time of the inflation, some were won through fees charged for student plays and lectures given by teachers. Some school systems, therefore, are richly endowed while others have comparatively few land-homes. One small city has sixteen such homes, six near large bodies of water, five in the lowlands, two in the mountains, one in the forest, and two near the city. Another larger city, however, has only four school homes, two for the higher schools and two for the primary schools.



GROUP OF STUDENTS GIVING AN IMPROMPTU MASS DRILL FOR THE AMERICAN VISITORS IN THE ARENA OF THE STADIUM AT DORTMUND IN THE REAR OF THE INDOOR GYMNASIUM

with emphasis upon biology, drawing, study of the stars, and healthful living. Some systems make a practice of sending to their land-homes children in poor health, with weak hearts, or with tubercular tendencies. These stay for indefinite periods of time. The cost is apportioned between the city and the home (according to the ability of the parents to bear the expense) or else assumed entirely by the city. The land-homes are ideal for growing boys and girls.

Gymnasium Buildings

FEW new gymnasia have been built in Germany since the war. Many old structures are necessarily still in use. They are generally poorly lighted, generously stocked with apparatus, small in floor area, and lacking in sufficient locker space and showers. It is natural that the physical education of today, like new wine in old bottles, should break out into the open whenever weather permits. New gymnasia are in prospect, however, and are slowly being built as money can be spared for them. These are ably described in a letter by the architect of a city in which several new gymnasia were recently built. He writes in part:

"The ... gymnasia are twelve by twenty-four meters. They are so designed that free-hand exercises can be performed by a class of 40-50 students (place per student, 2x2 meters). They are equipped with apparatus not only according to the needs of the higher classes of students, but also for those of the Turnvereins which use the gymnasia at night. ...A special room is provided for the instructor, in which he dresses, and in which balls, stop-watches, etc., are kept. An examination room is not included. Room for spectators is not provided in the ordinary gymnasium. Gymnastic exhibitions are generally given in the large Stadium or out on the larger sport places. As flooring for the gymnasium, we have found 10 mm. strong presscork very satisfactory. It must, however, be well cared for.

Lately ... a warm shower has been required after every gymnastic period. We have therefore provided two dressing rooms and a shower room. While one class is putting on their gymnasium suits in one dressing room, a second class, having just used the gymnasium and shower, can be dressing in the other.

The school playground ...(400 square meters) ..., serves primarily for gymnastic exercises conducted in the open, and can also be used for shot-putting and jumping (jumping pit). For the other sports (handball, javelin-throw, running, etc.) a special sports field will be laid out which will be at the disposal of the different schools and Vereins of the neighborhood."

Daily Physical Education

SEVERAL experimental schools have taken the forward step of placing physical education on a daily basis. Though a natural step to take, it was surrounded by much testing and experimentation in an effort to prove desirable physical and mental results. To have a period of physical education for each child each day, without raising the total of school hours, meant lessening the instruction period in some other subject—a difficult decision. At Halle, where the daily period of physical education was first introduced, two separate experiments were carried out. The first concerned itself with recording the gain in height, weight, chest circumference, and the vital capacity of the lungs. This was done three times during the year. The second attempted to determine mental alertness and fatigue by giving three tests (Bourdon, Ebbinghaus and Divisions) on two consecutive days, one without the period of physical education, the other with it. This was done four times during the year, and, in both experiments, every precaution was taken to make the results valid. Much the same method was followed in Berlin when the new program was established in one of the primary schools. Here the physical measurements were increased to include measurement of the upper right arm, calf, hand strength, running, throwing, jumping, and heart rate. The tests were cumbersome, and the results, while favorable, were indifferent. A far more emphatic endorsement was received from three hundred and ninety-nine Berlin parents when, at the end of the year, they were asked to write if, from their observation of their children throughout the year, they wished the new plan retained or the old one reinstated. Three hundred and thirty-eight favored the daily physical education period, twelve did so upon certain condi-

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Scouting and the Schools

By

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Deputy Chief Executive,
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THERE have been several very distinct trends in physical education. Physical training, let us remember, was not native to America. That is because physical training was probably older than America.

Physical training was imported into America. Established and well organized systems were superimposed upon the country, notably the German and Swedish systems. The country was divided between the two types. Well do I remember the battle of the systems. The emphasis in those days was on methods, upon forms, upon exercises, upon gymnastics and heavy calisthenics. Posture, for example, was seen from the point of view of corrective gymnastics. The static notion of posture held sway. Much of the military emphasis prevailed. *The emphasis was upon the exercises.*

Then physical training began to be indigenous, to take on characteristics peculiar to America. Dio Lewis and his light gymnastics; Robert J. Roberts with his "Short, Easy, Pleasing and Beneficial" slogan. It was the health emphasis. The hygienic basis. It was happy and informal. *The emphasis had shifted from the exercise to the individual.* Heretofore the exercise was important,—the way it was done. Now the individual was important,—the effect of the exercise. It was not only a step, but a leap, forward.

Gulick appeared upon the scene. He philosophized about physical education. He wrote much, he taught more. He had a happy field in which to experiment a school and a movement. He dealt with play, free informal play. Play became legitimatized, socialized, a part of education. *The shift was now to life.* Physical training contributed to life, to happiness, to organic vigor. Posture no longer was static, but dynamic. McKenzie wrought this principle into bronze,—that posture was not static but dynamic; not a rigid thing, but a thing of life.

PHYSICAL education broadened and athletics as well as gymnastics was included. My experience in two visits to England in 1914 and 1915 was startling. I found a very sharp line of demarcation between gymnastics and athletics. The director of physical education was in charge of the former, the volunteers in charge of the latter. The same has been true in America to a large degree. We failed to see life as a unity. This has changed, for life cannot be divided.

Gulick led us even farther afield. He created the Triangle as the emblem of the Y. M. C. A. *Physical Education now became a part of Religious Education.* This was indeed a revolutionary principle. To save the man one must save the whole man. Man is not a mind nor a body, nor a soul; not even the principle of a sound mind in a sound body; but rather all three in happy combination, interdependent, interrelated. Physical training, if you please, rose to a spiritual realm as a result of this. Church architecture changed. Parish houses, social centers, gymnasia became a part of church buildings. Physical education ran out into corners where hitherto it had been unknown; and may I remark, physical educators did it, led it.

Physical education next became a part of education, a part of pedagogy—in college, in high school, in elementary school. For a time it operated under cramped conditions. We tried to fit it into the school system, into the school room and under school conditions. Much of it was formal, monotonous, dull, deadly; it was fitting physical training to the school, rather than to the pupil, requiring youth to take exercise, making youth exercise by law. What faith we have in law! Law making is the favorite indoor sport of the American people. How ridiculous, how stultifying! Children should want to exercise and they will exercise if the exercises are made attractive. The only excuse for law in this instance, is not to make children exercise, but, instead to make school boards furnish the equipment. But the newer school buildings are providing increased facilities and enlarged opportunities for election. These legal requirements and these equipment restrictions have resulted too much in placing the emphasis upon teaching rather than upon supervision and administration. The director of physical education should be more an executive than a teacher. If he is the latter, he will be limited to the schoolroom; if an executive he will be related to a wide range of activities. For physical training has become socialized, municipalized; the emphasis now is upon society.

There are today two great trends very evident.

First: The School is now endeavoring to serve the community—to be a social force, a social center. No longer does it teach subjects. It trains for life, for

citizenship, for character. It seeks to become a social force. Not the school room but the community is the field of operation of the modern school.

Second: Unique physical training and recreation and character making movements have arisen in the nation and touch the lives of several millions of our youth. Their very attractive programs have lure and charm and variety and spontaneity. They comprise nature lore, woodcraft, camp craft, hiking, swimming, aquatics, winter sports, life in the open. They are voluntary movements, socialized, humanized with a service motive. Some of our physical educators seem to be unaware and unrelated to these modern recreation movements. They have revealed marvelous demonstrations of the possibilities of volunteer leadership.

NOW the school and these modern movements, each with social aim and service motive, should be correlated, integrated. For the same youths are related to each, for we are interested not in the school as such but in youth, in life, in society.

When on the Military Training Commission of the State of New York, administering a law requiring boys to take military training, we not only interpreted it to mean physical training largely, but we gave credit to boys for any form of physical exercise—for Scouting for illustration, and for work in places other than the school. Why not? We are not interested in a peculiar set of exercises but in boys, in growth, in health.

Now between the School and Scouting there is a growing relation. School buildings take knowledge of Scout needs and have specially constructed rooms. The School is moulding itself to fit the community. Schools give credit for Merit Badge work. Scouting however, must not be in the curriculum. It would kill Scouting. Scouting must be voluntary, not compulsory. It must be extra-curricular.

The most notable experiment, or rather experience, of cooperation as between the School and the Scout movement has been in Detroit. Here a very serious interest has been taken in the matter. The Superintendent of Schools is the dynamic leader of the plan. He is a member of the Executive Board of the Scout Council, as are several other school officials including the Director of Physical Education; and several members of the Scout Council are on the School Board. School troops are organized in the schools, meet in the schools and are operated as are any troops. Troop committees are usually made up of teachers and fathers of Scouts. Scouts are voluntary members of school troops.

NOW the unique thing is that there are two Field Scout Executives paid by the Board of Education who have desks in the Scout office. They supervise the 96 troops of Scouts in schools. Over 2,000 Scouts are in these troops. School swimming pools are made available without cost to Scouts for, of course, the Scouts are school boys. Last year 972 Scouts were taught to swim, 700 of whom learned in the school natatoriums. Rooms and gymnasiums are available during the summer months. Scouts in turn perform useful services to the school. Scouting sets up situations for the development of character.

Here is a worthy and community-wide service between school and Scout Council for entering effectively into the leisure hours of youth, a correlated, organized, socially scientific effort. The school becomes a continuing influence in the life of the boy. The School recognizes the wisdom of the pedagogic principle of *learning by doing,* so inherent in Scouting. Dean Russell says the schools would, if they could, use the Scouting method in their educational plan. Here is a practical form of training in citizenship, not by essay or oration or declamation, but by giving boys tasks to perform, the performance of which gives them the consciousness of citizenship on a participating basis. In turn, the boy becomes interested in the school. It is a live thing now to him. School is an adventure, not a task.

We are speaking much these days of the new leisure, of the growing increase in time for leisure. We must attack this leisure problem in a big way if we are to make any dent upon the matter.

These boy agencies referred to have made great discoveries in methods for interesting boys in wholesome recreation. They have had a freedom the schools have not had. They represent large adventures in meeting the leisure time opportunity. They have discovered ways of enlisting and training hosts of men and women in intelligent volunteer service in behalf of recreation. The schools and these agencies have much in common. They should be closely correlated. In many communities they are.

WE ARE standing at a unique period in the life of the nation. This marvelous scientific age has done wonders before our very eyes. The other day I saw a photograph of a man who motored to an air field, pierced the heavens in an aeroplane, descended to earth in a parachute, then boarded a submarine and descended to the bottom of the sea. All of this was done within an hour. No one man had ever done this before. It was impossible of performance before. It required the contributions of this scientific age to do it. It is a marvelous and magical age.

Probably the greatest contribution of science is that *it has broken the back of toil.* At one time earning one's daily bread used up most of the energy and most of the time of the individual. Now it is different. Science has changed it. With the aid of modern devices man can do a large amount of work in a short space of time. The needs of the world are more easily met. As a result men and women are having more leisure time and this will increase still more. Soon all will have as a minimum the six hour day and the five day week. There will be time for recreation and culture and pleasure.

The problem of the age will be to fill these leisure hours with romance and adventure and make them character building. This is the problem of the age. It is the opportunity of the times. Will we be equal to it? The fate of the nation depends upon it. Will it mean decadence or a superior culture? Will it be time wasted or time improved? Will those now engaged in rec-

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School Health Education

By Charles C. Wilson, M. D.
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THE trend of this discussion of School Health Education will depend upon the interpretation which is given to the words "School Health Education." These words might be interpreted to refer only to the health lessons which are taught by teachers and in such a case it would be necessary to confine my remarks to a discussion of material content for health lessons in the different school grades, the manner of presentation of this material, the measurement of the results of such instruction, and the preparation of teachers for this work. However, I am going to give a very broad definition of "Health Education" and my ideas will be formulated on the basis of this liberal definition. "Health Education" is the sum total of all of the experiences of the child which exert a favorable influence on the child's health, physical or mental, present or future, or on his attitudes toward or his knowledge of personal and community health.

With this definition it is evident that the health education of children is a cooperative proposition and that the school does not have full responsibility for this important work. The school must work with the parents for health education, and vice versa, the parents must work with the school. Most parents are anxious to have healthy, well-developed children. These parents must feel that the school health education program is helpful to them in their own efforts. Other parents are indifferent to the health of their children, and the school should try to convince these parents of the importance of health. Parent education is as much needed in these cases as is child education. To further cooperation between school and parents in health education I believe that every school system should encourage its Parent-Teacher Association to form a Health Committee. Such a committee can be of inestimable value by suggesting to the schools ways in which they may help parents and in getting parents to help the school in health measures which the school initiates.

If health is an objective of education, what can the schools do to attain this objective? In other words, what situations can be planned for the child which will result in experiences which exert a favorable influence on the child's health, physical or mental, present or future, or on his attitudes toward or his knowledge of personal and community health?

No attempt will be made to mention everything which the school can do for child health, but some of the more important parts of the school health program will be mentioned and a few remarks made concerning each. To facilitate the organization of ideas on this subject I will discuss school health education under the following subdivisions: (1) The Provision of a Hygienic Environment, (2) Medical Service, (3) Nursing Service, (4) Physical Education, (5) Health Instruction, (6) Special Classes, (7) Mental Hygiene, and (8) Hygienic Arrangement of the School Program.

Provisions of a Hygienic Environment

THE first thing that a school can do and should do is to provide the child with a hygienic environment while he is at school. The teacher is an important part of the environment of the school child and the school which supplies teachers who are examples of good health has made the first step toward the health education of the child. The attitude of the teacher toward the child is of supreme importance to the child's mental health. The nagging, scolding, critical teacher may seriously damage the mental health of the child, while the cheerful, understanding, encouraging type of teacher is laying a foundation for increased mental health. Healthy teachers with a knowledge of children, how they grow and how they behave and with a friendly, cheerful, sympathetic interest in children are important factors in the environment of the child.

Other factors in the environment of the child which are important from the health point of view are the provisions of sanitary drinking fountains, the supply of adequate toilet facilities, proper ventilation and heating, a building that is kept clean and neat, seats and desks adjustable to the size of individual pupils, adequate washing facilities with an adequate supply of soap and paper towels, proper lighting, and adequate playground space with proper equipment and supervision.

I will not go into detail in regard to school sanitation, but I do want to mention its great educational value. Teachers may give lessons on cleanliness, but a clean, attractive wash room which always has a convenient supply of paper towels and of liquid soap will have a greater value in the health education of children, in regard to cleanliness, than many classroom lessons. Likewise, the building which is clean and neat teaches children ideals in regard to cleanliness. A hygienic environment is essential for the protection of the pupil's health and is also a factor in the child's education.

Medical Service

ANOTHER important part of school health education is the provision of medical service. Medical service should include the health examination of children, the control and prevention of communicable diseases, and the maintenance of various types of clinics for the medical and surgical care of indigent pupils.

Health Examinations. The method of conducting

school health examinations has undergone drastic changes. Instead of a rapid inspection of the child, without any comment to the child or parent, we now hold as ideal the examination which is made leisurely and which is marked by an exchange of ideas between the parent and the physician. These slow, unhurried examinations are examinations which are made with the purpose of acquainting the parent, or in the case of older children acquainting the child, with the child's health assets and health liabilities. The physician gets information from the parent in regard to the child's health habits. He gives advice about physical defects which exist and explains how these defects may affect the future health of the child. He may be called upon for advice in regard to behavior problems, such as the child with improper eating habits, the child suffering from enuresis, the sullen, shy child or the bullying type of child. The aim of the physician in making these examinations is to educate the parent and the child in regard to the child's health needs, to help create ideals in regard to child health, and to develop an attitude which will result in every child reaching the highest possible health standard.

DR. CHARLES C. WILSON

How often should these examinations be made? Dr. Charles H. Keene of the University of Buffalo writes in his recent book, *The Physical Welfare of the School Child,* "It is desirable that pupils be examined each year in the lower three grades. Pupils should receive at least two additional examinations while in grades four to nine. An examination each year of school life is the aim in many communities." At the present time the frequency of health examinations in different cities varies with the amount of money available for this work. Despite these financial limitations the ideal of an examination of each child each year of school life should always be kept in mind.

The value of the health examination is greatly increased with proper follow-up work. If the physician recommends the care of some physical defect or advises particular attention to certain health habits, the teacher and nurse should do everything possible to see that his recommendations are carried out. The teacher's part in this work is very important and she should be acquainted with the needs of her pupils and should take a leading part in getting the correction of physical defects and in getting parents' cooperation in regulating the health habits of pupils. Ribbon awards, dental health campaigns, and similar projects are a great help in getting the correction of remedial defects and in stimulating parental interest in child health. In such projects the most desirable standards are those which require a child to attain the highest standard he is capable of but disregards non-remedial conditions.

Communicable Disease Control. Besides health examinations the medical service of the public schools must give attention to the prevention and control of communicable diseases. In regard to smallpox and diphtheria, parents and children must be educated in regard to the value of preventive measures and should be urged to obtain preventive treatments from their family physician or from clinic facilities when treatment cannot be paid for. For these and other contagious disease provision must be made for the immediate exclusion of children showing any signs or symptoms of sickness and definite regulations should be formulated concerning the re-admittance of children at the termination of sickness. Such children should not be re-admitted until it is certain that there is no danger of spreading the disease to others.

Clinic Facilities for Indigent Children. No school health program can attain its objective—healthy children—unless clinic facilities are available to take care of the correction of remediable defects which exist in children whose parents are financially unable to pay for the needed medical or dental services. Clinic service is especially needed to care for the treatment of vision and hearing defects and for dental repair and dental prophylaxis. Surgical clinics to care for tonsil and adenoid operations are essential to any effective school health program. How these clinics are conducted and by whom is a local question. In some cases the clinics will be conducted by the City Department of Health, in other cases by the Board of Education. In some cities certain clinics are conducted by hospitals. Regardless of what city department takes care of the administrative details of the clinic, each community has the responsibility of providing such facilities and the effectiveness of the school health program is greatly increased when this responsibility is accepted. The administration of these clinics is best worked out with the cooperation of the Medical and Dental Societies, and care should be taken to see that those able to pay for their dental and medical service do not take advantage of the clinic facilities.

Nursing Service

Nursing service is everywhere recognized as a part of school health education. The nurse acts as a correlator of the activities of the school and the home and is of great value in interpreting the school health program

to the parents and in informing teachers about the home conditions of pupils. She does first aid work, but always with the desire of teaching others the principles of such work. Where teachers are untrained, the school nurse makes classroom inspections to observe signs of communicable disease and to pick out children who need a complete examination by the physician. When the nurse makes such inspections she should do it with the purpose of demonstrating to the teacher how such inspections should be made and what to observe so that the teacher will later be able to make her own classroom inspections. The nurse is of proven value in encouraging parents to have physical defects corrected or treated.

Physical Education

Daily physical activity is a requisite for the normal physical growth and development of children. The properly arranged school program allots one period each day to physical education. It is encouraging to note that there is an increase in the use of outdoor facilities for this part of the school program. It is my opinion that this trend should continue until all of our physical education activities are out-of-doors except on stormy days and days when the playground is muddy. Proper surfacing and drainage of playgrounds will decrease the number of days when outdoor work is impossible because of muddy grounds. Our gymnasiums should be considered as rainy day playgrounds.

Unfortunately much of our physical education work has been conducted without due regard to the capabilities of the individual pupils. In the future we will find increased efforts to adopt our school program in this subject to the individual needs of pupils. When this is done the strong, large, robust, vigorous individual and the small, anemic, underweight child will not be given the same program and their achievement will not be marked by the same standards.

As greater attention is paid to the individual needs of pupils the necessity of grading physical education activities will be evident. Children who are capable of doing sixth grade academic work are not all of equal ability in physical activity and it is just as unreasonable to give them the same physical education work as it would be to give all children of a certain height the same academic work regardless of their intelligence.

With the realization of the need for physical education work in the school program has come the recognition of the great value of supervised playground activities during before-school, after-school, and after-supper hours. Many communities are using their school physical education teachers for this work and find the special training and abilities of teachers an asset in the development of this recreation program.

Physical education is conducive to the health, growth and physical development of children, but it should also be recognized that there are social and moral lessons that can be taught through these activities. The definition "physical education is that education which can be obtained through physical activities" denotes that the objectives of physical education are the same as the objectives of all education. Teachers of physical education would do well to keep this definition in mind and constantly ask themselves how the work they are doing helps children to progress toward the goal which we set for them when we list the objectives of education.

Health Instruction

I will use the term "health instruction" to denote the classroom activities of pupils and teachers which are conducted primarily for the purpose of inculcating health habits, developing health attitudes or gaining knowledge regarding personal or community health. This work is a modification of old courses in physiology and hygiene and is marked by the emphasis which is placed on health habits. Particularly in the primary grades the emphasis in health instruction is placed on habit formation. With efforts to promote habit formation is associated an effort to develop in children those attitudes which will make them want to be healthy, want to practice the health habits which they are taught, and want to have physical defects corrected. In the older grades the reasons for the practice of health habits are explained according to the child's ability to comprehend —that is, health knowledge is gained.

The requisites for a successful health instruction program are: (1) A course of study which is flexible enough to allow the skillful teacher to modify certain parts of the program to suit the needs of her pupils and detailed enough to help the inexperienced teacher of health. (2) A conscientious effort on the part of each teacher to measure the results of her work in terms of improved health of children and in terms of health practices. (3) Teachers who are prepared to teach health. If not prepared for this work before being employed, a teacher should get this training afterward.

Attempts have been made in some cases to departmentalize health instruction. This, I believe, is not conducive to the best type of health work. A teacher who is going to give health instruction should be well acquainted with the health condition and health practices of her pupils. If a teacher has more than 30 or 40 pupils, she cannot keep informed regarding her children and her health instruction will lack the desirable relationship to the needs of her pupils. Every teacher should be a teacher of health; this instruction should not be departmentalized.

All health instruction cannot be given in regularly scheduled periods. Throughout the whole school session the teacher should be alert to take advantage of situations which occur and which can be made the basis for a health lesson. Correlations must be made with a number of other subjects, and the practices of children which have a bearing on health should be observed continually. Keeping the mouth and nose covered with a clean handkerchief when coughing or sneezing, keeping the fingers away from the nose and mouth, washing the hands after going to the toilet, etc., are things which cannot be taught at a certain time and then forgotten for the rest of the day.

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Camilia Outfit in 1851

The Evolution of Gymnasium Clothing for Women

By Clarence B. Aldrich

From* THIS *all the way to* THIS *in Eighty Years

IN THIS article, I endeavor to deal with women's dress used in sports wear and for the gymnasium, and in a few words will cover a long period of time. It is not, however, intended to be in any sense a history of physical education for women. And yet, in delving into the past, searching through ancient records of schools and colleges, trying to bring out the old that is past, to compare with the new and the present, it deals, nevertheless, with the historical. Neither does the author claim entire accuracy in all his statements, but the periods mentioned are approximately correct as to historical accuracy and consecutive order in which the events occur.

The first woman in the world, in her physical exercises, according to the most authentic reports available, wore the minimum of clothes. She was not, however, so it seems, altogether satisfied with the style, and eventually made changes in her attire most fitting and proper.

During the next 5,000 years, if there is anything in history related to the subject of physical education for women, or even the clothes she wore upon such occasions, it will fall upon the shoulders of one more patient than the writer to search for it and bring it into the light of the present day.

In about the fourth century, however, before the Christian Era, in Greece, we find something very interesting upon our subject. The ancient Greek was not only required by the State to instruct his son in gymnastics of all kinds, but to give him up entirely to the State at the age of seven years, to be educated in running, jumping, boxing, wrestling, the throwing of the javelin, and in all exercises which would develop a soldier.

About the girls and women there is very little said, except in Sparta, where we first learn of physical education for women. There, it is asserted, under the Spartan Agoge women took up physical exercises by themselves under the direction of the State, with the same object as in the case of the men—the production of superb soldiers. These girls, it is said, wore only a short skirt slit on both sides to the hips, or sometimes a cincture—or sometimes, it is also said, nothing at all. The historian reports that these girls were not ashamed of their wonderfully developed bodies and shapely limbs.

Soon the glory of Greece was swallowed up. The power of Rome rose and fell. Religion at its worst came into power, and it was not until well past the Middle Ages that men and women came gradually into freedom from the universal theological dogma that the body was not to be developed but was to be abused, maltreated, even tortured, or at least held in contempt; while the soul only was elevated to the level of superior importance. Under the lead-

Modern Wash Suit for the Gym

ership of this kind of thought, physical education had very little chance for man or woman or child.

In following our subject, we must now make another tremendous historical jump from the time mentioned before the Christian Era, to this country, in the fifties, when we added to our vocabulary the word "Bloomer", adopted when Miss Amelia Jenks Bloomer of New York startled the world with her Camilia outfit in 1851. As a street outfit, this was a complete failure. It consisted of a dress to the knees, below which were trousers cut full and gathered at the ankles. Audiences ridiculed and the press jeered. It was our start, however, from the conventional full skirt.

Suit Recommended by Dr. Dio Lewis

In about 1862 at Mt. Holyoke, we read in the American Physical Education Review of March, 1909, page 144, as follows:

"The Calisthenics were taught in a room in the second story, not yet used for recitation, etc. The time was no less than 20 minutes nor more than 30. No change was made in the dress, and no suggestion was made concerning the removal of 'stays'." But in the year 1867, five years later, describing the Lexington School for Girls, we read:

"The girls went to bed at 8:30 every evening, rose early in the morning, and went for a walk, which walk was repeated during the day. They exercised twice a day. *They took off their corsets.*" (History of Physical Education, by Leonard & McKenzie.)

Suit adopted at Vassar in 1866

Here, then, occurred perhaps the first and most abrupt and revolutionary change in the apparel for girls in the gym, which was the forerunner of all the changes that were to follow.

The earliest actual attempt on record of preparing teachers of physical education and a suggestion of the type of clothing they should wear was made by Dr. Dio Lewis in 1861, at his Normal Institute of Physical Education in Boston, from which institute the first year seven men and seven women graduated. It was not stated whether this outfit ever actually appeared on the gym floor at the Normal Institute, but in the American Physical Education Review for March, 1909, it states that this costume was introduced into actual use at Mt. Holyoke in 1863, under the leadership of Mary Lyon, and a very few years later another one of our oldest colleges for women adopted a gym suit, modified from that designed by Dr. Lewis. I refer to Vassar College where in 1866, a costume was used similar to the one here reproduced from a picture found in "Vassar College and Its Founder," by B. J. Lossing, 1867.

I learn also that the University of Illinois started its first gym class in 1875, and permanently established the department in 1879. I find also a letter from Dr. Hanna of Oberlin College, dated 1884, which states, "I wore at the time I started to work, a blouse with very full bloomers. Mrs. Johnston (Dean) would not allow the students to go without a skirt, and the result was a scanty skirt and scanty bloomers, a suit that was anything but becoming. We had a woman make these suits at the gymnasium." We also learn that later a woolen blouse and woolen bloomers were used there, and still later a one piece black suit, which we herewith reproduce. I quote Miss Mary Channing Coleman of the North Carolina College for Women as follows: "Pleated bloomers of tremendous width and excessive length were used for Physical Education classes from the time the department was started, about 1895. In those days we were so genteel that those bloomers were modestly referred to as 'divided skirts.' Our first circular bloomer was adopted about 1925."

So far as I am able to learn, the first high school in Illinois to adopt pleated bloomers and to appear in them in public was Lake View High, Chicago, at a field day program arranged by Dr. Groener of that school, in 1900, which was a very early date indeed for the bloomer to appear in public.

Time and space will not permit me to make mention in detail of the changes made in gymnasium costume for women in the various colleges and schools of the country, nor the consecutive order in which they came into line. For purposes of illustration, I have mentioned only a few colleges before 1900. There were others, but the idea as yet had spread very little. It would be truthful to state there were not many girls wearing gymnasium bloomers prior to the year 1900, nor many colleges that had adopted them. I can also state that owing to the insistent demand from all sources, the bloomer and middy was in universal use in the gym by 1910. It took sixty years to bring about the change, but gradually and surely the change was made from the ridiculous and absurd to the practical.

One-piece Black Suit

There were other influences also outside of the colleges and schools which gradually began to work up public sentiment toward the use of practical and sensible clothing for women, and one of the chief of these influences was the bicycle. "There is no doubt what-

ever," says *The Turn of the Century,* "but that the bicycle had a tremendous influence on the subject of women's clothing, not only for the gym but for street wear. The judgment of the authorities on this subject, who have been consulted by the writer, agrees with common recollections that the bicycle started the revolution."

An amusing incident occurred during this period. A certain young man was employed in Lynn, Massachusetts, in 1897, and was called in the course of business on several occasions to Salem, a nearby city. His young wife accompanied him, and they rode their bicycles. During the evening on one occasion, it began to rain, and as the last car had gone and they did not care to ride home on their bicycles in the rain, they went to a hotel to put up for the night. When the room clerk saw the woman in her riding skirt *way up to her ankles,* he decided that his rooms were full, and so advised the couple. They were compelled to put up for the night in a third rate hotel of doubtful reputation. To those even moderately inclined toward the conventional, a girl in her bicycle skirt looked, and therefore must have been, tough.

Women began timorously to ride and gradually, daringly, a few women began to appear with shorter and shorter skirts, weighed down with lead sewed in the bottom of the hem.

The short skirt, and later the divided skirt made for the bicycle, was the beginning of a decided change. The movement for practical clothing was started and well on its way in the early years of this century. The subject of women's clothing was thought of and debated. On March 30, 1906, a paper was read to the Public School Physical Training Society in New York City by Katherine D. Blake, which I quote: "In the list of questions sent out for discussion by the Society I have looked in vain for two which seem to be vital, yet I could not find them. One relates to girls only, and as your session as devoting themselves to the study of athletic problems applies to women and girls, I will put it first. Should girls be permitted to exercise in clothing that is unhygienic and prohibitive to free movement?" She goes on to say that authoritative action should be taken, forbidding exercise under such conditions.

Old Style Middy and Bloomers

At about this time also lawn tennis began to be played, and for the women to play this game, wearing long skirts, was impossible. Therefore skirts were modified, and sports for women began to be introduced into the colleges, and the more daring, especially in basket ball, began to appear in bloomers. "These garments," says *The Turn of the Century,* "were ridiculed in the press and denounced in the pulpit, and suffered once more the same reviling as had the bloomer of 1851." (See the cut of this period). These bloomers were very full and exceedingly long. They used to be called "a four yard bloomer," and salesmen, in selling or demonstrating, used to "point with pride" at the excessive fullness of the product of his house. In the course of time the ungainliness and ugliness of these extremely full bloomers became apparent, and gradually more and more they appeared lessened in width and shorter in length.

Modern Knicker and Blouse

The evolution of women's gymnasium clothing, however, did not stop with bloomers. By 1923 there came a murmur of discontent from the physical director, which grew in a very few years into a demand for something still more practical and sensible. Something else was wanted other than a bloomer with pleats. The knicker was being worn some by women, in playing golf and in hiking. Of course, a knicker with a strap below the knee would not do for the gym. The change was very simple (afterward). The knicker was cut off and an elastic was run in the hem, making a gymnasium knicker practical in every way. (So far as I know, the first University to adopt this new knicker was Wisconsin.)

Modern One-piece Gymnasium Suit

Something now had to be done about the upper garment. The middy, suitable for girls, had been worn for several years. (I should say it began to appear in a large way on the gym floor in about 1910.) The middy and the less full bloomer, or knicker, made a very good outfit for high school girls and for colleges where the facilities for change were very meagre. As a practical garment for the gym, however, the middy blouse was never really suitable.

The middy was invariably worn outside. Now appeared a garment made of bleached nainsook, or long cloth, with "sport" or other style collar, and with teddy bottom. This garment worn inside the bloomer, made a very good practical garment for the gym. If worn correctly, as intended, pulled up and blousing at the waist, it was a great improvement over the middy. It also served as both outer and undergarment. There came to be such a demand for both of these garments

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The Changing Emphases in Physical Education ☆

By Florence D. Alden, *Director of the Department of Physical Education for Women, University of Oregon*

SCARCELY a decade ago it was the general practice to put all first year students, regardless of previous training, of individual differences, or of personal interests into "Required Freshman Physical Education." If during the first year of work the student had been on the floor the specified number of hours, she was passed into required "Sophomore Physical Education." In those days were students all just alike? Did they all need just the same development? Did they progress evenly from day to day and from year to year? Those long lines doing invented exercises on command in perfect form satisfied *our* sense of symmetry and perfection, but did the work satisfy *anything* in the student? What a mechanism we had to set up against cutting, and what a variety of sick excuses were poured in upon us! In September of Junior year in a grand rummage sale each girl joyfully flung her voluminous suit to an entering Freshman with a jubilant "No more gym work for me!" Did we think we were educational—or didn't we think? Against the dark background of those times let us look at some of the encouraging new emphases that Physical Education is making in accord with sound educational principles.

Grouping on the Basis of Needs

ONE of our most constructive new emphases is in the use of tests and measurements. It is interesting to remember that with our anthropometric tests we physical educators were among the first in this field. But we did not always know what to do with the data that we had acquired, or realize the significance of what we had found, and so the general educator soon outstripped us. But now we are coming to the fore once more with some very scientific pieces of research. Williams[1] offers a valuable discussion of the problem and needs; Bovard and Cozens[2] give the history of tests, and an excellent analysis of the types—anthropometric, cardiovascular, physical efficiency, etc.—with an evaluation of each type. Brace[3] and Rogers[4] and Cozens[5] have published perhaps the best individual pieces of research.

If by means of tests we can find out the special needs of our students, we can build our programs to meet these needs, can place the students in homogeneous groups so that interest is high and learning economical, and can care for all grades of ability. Over a period of several years we have been experimenting here at the University along this line. Our present method is far from satisfactory, but will perhaps prove interesting as an example of an effort in this direction.

Before registration the entering students are given a medical examination on the basis of which prescription is made into two groups—corrective and general. All those in the general classification are given a short activity test. This consists of six events — climbing jumping, running, arm - shoulder - eye coordination, strength of abdominal muscles, and strength of shoulder and arm. We have found through testing about 800 students that the reliability and validity are good and that the test has a fairly high correlation with ability in the actual activities offered in our program. It would seem, therefore, to give a fair method of grouping girls according to their ability to handle themselves as well-coordinated units and in relation to their environment—movable and stationary—and can perhaps be called a measure of agility or motor ability. On the basis of this the students are grouped into (1) honor, (2) average, (3) novice.

Caring for all Grades of Ability

SUPERIOR Student: The needs of the honor or superior girl are met in various ways. In sports she may be allowed to take the intramural activities for credit, or in swimming she goes into Red Cross Life Saving and Examiner work, or into diving or special classes in which she works individually, going under leadership as fast and as far as her ability will carry her. In tennis she may enter a tournament or play with the skilled men players, or with townspeople who can challenge her ability. In dancing she takes up original and creative work.

The Average: The average girl is given a very free choice of a wide range of activities. Just how this is guided toward desirable objectives is described under the paragraph—"Carry-over Values."

The Novice: The novice is, of course, the problem. These girls are obviously lacking in the coordinations and fundamental skills necessary for participation in highly organized activities, yet they are in this group because they have not had, all through their childhood, a full physical education program—do not know how to let go, to play. Obviously, grinding drill on fundamentals is not indicated but rather a program full of satisfactions and the recreative element which will at the same time build up these basic lacks. We are experimenting with a program which we call, for lack of a better name, "Moderate Sports." An effort is made to put into this program activities which have elements like those in the more highly organized activities and yet are simple enough to fit abilities of less skilled girls.

Restricted Work: A very marked change seems to have taken place in the methods of approaching the problem of the girl who needs some form of restricted work. The student who has a defect that will yield only to persistent continuous individual "treatment" is a

[1] See bibliography at end of article.

patient or a clinic case and therefore should be in the hands of a doctor or a physiotherapist for correction. If possible, participation in a normal educational program should be arranged while the definite treatment work is going on, so that she may not lose the socializing and developmental values.

The work for those who have temporary, remediable defects has now-a-days, much more than formerly, the group element and the play spirit. Valuable corrective games have been devised which bring about the needed correction and are made effective by the force of interest.

The student who is strong enough for general work but who because of some permanent handicap such as lameness, deafness, or blindness, does not fit in, needs a wholesome recreative program. An interesting class of natural dancing for the blind is being tried here with splendid results. It gives to these inevitably circumscribed and inhibited girls a spontaneous freedom of action, a joyous means of self-expression and a most wholesome emotional outlet.

Homogeneous Grouping Within the Activity

AFTER the average and honor students have chosen their activity, we try further to consider differences in skill level and rate of learning. For each activity, objective tests based upon the elements of the activity have been worked out. Wherever administratively possible, these are used at the start to divide the students into beginning, intermediate, and advanced groups. Swimming, dancing and tennis lend themselves particularly well to this, as the enrollment is always so large that it is possible to offer classes to fit all grades of ability. Thus by means of preliminary classification tests the girls are grouped on a basis of general need; then after they have elected an activity offered for their classification, they are grouped within that activity on a basis of skill. It would seem that this ought to give each one the type of training that she needs, to make possible enjoyable working with her peers, and secure the most rapid learning.

Scientific Progression and Marking of Progress

TOO long we have assumed that if a student is present in our classes she is learning; or if this is too obviously not true, we have consoled ourselves with the thought that she is getting "exercise." So if she was faithful in attendance, had a good "attitude" and was "trying," she received a high grade. The tendency now is to grade, not on mere bodily presence, but on performance—skills acquired, control attained.

The objective tests made up of the elements of the activities are a useful means of doing this. If they are progressively more difficult they may be used first, as mentioned before, to classify the girls, then to mark progress and to define the goal, and finally to grade on the basis of improvement over the initial score. Written information tests covering rules, strategy, formations, and plays may also be used to determine the extent to which the student is gaining a mental grasp of the work.

Establishing of Wide Interests—Carry-Over Values

ONE of our avowed aims is to establish lasting habits and tastes in recreative activities that will withstand the economic and social demands of after school life. If this is to be accomplished we must have interest. Hence, the tendency toward "natural" activities and towards freer election. The student should develop enough skill to receive the satisfaction of accomplishment, the thrill of pitting herself successfully against others. She should also have a wide enough repertoire of interests so that under the limiting opportunities of the work-a-day world she may be sure to find something in which she has already acquired an interest. She should also have established fundamental bodily control so that new activities may be easily learned.

To meet these points we are using this plan: we offer a very wide range of activities—eighteen in the course of the year—adapted to meet almost every interest. The average or honor student may choose any of these provided that in the six terms she takes at least two terms of one and is able to pass the second term test, and takes at least three different activities. This should build up a fairly high grade of skill in one and moderate skill and an interest in several. Of these three, one must be a rhythmic activity, one an individual sport, and one a team sport. This gives her a rich recreative program and all round development while she is in college, and is an attempt to establish basic bodily controls upon which new skills may be built.

Better Teaching Methods

MANY physical education instructors feel that they are offering primarily a recreation program and fear that the application of sound teaching principles will kill the joy in the activity. Many, however, have found that the satisfaction in accomplishment, and the joy of achievement and of the ever-increasing mastery of the body more than offset any tedium that may accompany drill on technique. If the familiar device of waiting for the "felt need" is used, there need be no tedium. The method applied to a game would be to start the class with the minimum of fundamentals, building up the game and playing it as a whole as soon as possible. When through skillful suggestions the class sees, by its faulty playing, the need of further drill, it is given. Then more playing and more technique until the requisite individual skills and team work are developed.

"Griffith in his 'Psychology of Coaching'[6] and his 'Psychology of Athletics'[7] has done some excellent experimentation in economical learning, in rapid skill development, in the relation of practice periods to rest periods, in the whole and part method in motor skills, and in many other phases of improved teaching technique."[8]

If we are to justify our claim of being educational, if we are to acquire and maintain a vital place in the edu-

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Group and Individual Play

IN the September issue of the JOURNAL, Dr. Esther Richards in her article, "Mental Hygiene Aspects of Physical Education," made some points that physical educators may well heed. In the present day enthusiasm for recreational activities of the individual type, that will carry over as hobbies into adult life, there is every likelihood that the values of group play and of team games will be overlooked or slighted. While it is true that team games once monopolized the attention of the physical education teacher, it is now just as true that there is danger of an overemphasis in the other direction. Therefore, a caution such as Dr. Richards has contributed is very timely. Such statements as the following are bound to make our profession hesitate when it comes to building a curriculum of play and to insure that both the team and individual types of activity shall get their proper attention.

"Play, and especially group play, is one of the great balancing factors of the personality."

"Our success or failure depends largely upon our ability not only to get along with other people but our ability to enjoy group contacts."

"In group games, the child is relieved of self consciousness; she is one of a team with common goals of achievement and can express herself without handicap from native inhibitions."

"There is no reason why honest competitive struggle on the playground is any more demoralizing or conducive to the development of pugnacious tendencies in youth than is competitive struggle for Phi Beta Kappa or senior honors or parts in dramatics."

There is no gainsaying the fact that each type of activity (group and individual) has values that are necessary to the growth of a well rounded personality: the one in developing traits that make for success in a life in which cooperation and competition will be factors; and the other in developing individual interests and lifelong resources in the way of healthful recreation. Neither can it be denied that each child presents his own personal problem and may need to be guided into certain activities which will lead to harmonious development. Individual differences must be considered. In short, the whole matter largely resolves itself into proper emphasis and direction by the teacher who has the program in charge.

The White House Conference

AN event of significance to the health and physical education profession is the final meeting in November of the White House Conference on Child Health and Protection. For over a year, since President Hoover called the first meeting, the four sections of this conference have been compiling a vast amount of information which will be presented at the coming session.

The four sections, divided into committees and subcommittees, began with an original group of seven hundred experts in the fields of Medical Service and its Relation to Children; Public Health Service and Administration; Education and Training; and the Handicapped Child. As the work progressed, however, new and unforeseen investigations were necessitated until eventually the services of eleven hundred trained workers were needed to secure the information that was necessary. The Conference is not devoting itself exclusively to the "integration of existing information" but is also carrying out "several interesting pieces of original investigation."

Records of 100,000 children from both urban and rural districts will be utilized in one of the studies which deals with medical service for the pre-school years. From this data it is hoped to discover the reasons why so many children reach school with physical handicaps which earlier, under proper treatment, might have been prevented or corrected.

At the same time, another study will cover the special care to be given physically and mentally handicapped children so as to offset their deficiencies and to better adjust them to their environment.

The problems of the city child--not only those concerned with fresh air, sunshine, and play in congested areas, but also those of family life and discipline in general—will receive special attention. The influence which the parent has over the child's future conduct will be stressed as will also the need for better parent and school cooperation in behavior problems.

Sight-saving classes, regular medical inspections, safety instruction, and psychiatric examinations are a few of the many other problems of importance to the welfare of children that will be summarized at this huge gathering.

The significance of this Conference is aptly summed up by Ray Lyman Wilbur, M.D., Secretary of the Interior and Chairman of the Conference, as follows:

"Viewed as an isolated fact the cost of a constructive program in medical service, education or recreation seems staggering when we add up the bill, state by state, and organization by organization, but in comparison with a national bill for sickness, or delinquency, or crime, it dwindles. If the White House Conference on Child Health and Protection does no more than teach us to compare these values it will have made a great contribution to our national welfare."

A Four Year Program for High Schools

Physical Education in High Schools when applied for Credit presents Many Problems

By Louis Kulcinski

State Supervisor of Physical Education, Illinois

THERE are many problems and factors to be considered in the organization of an effective four year high school physical education program, but I shall merely attempt to briefly outline such a program. I shall make no attempt to mention all the activities for such a list which may include all types and forms that will fit in best with local conditions.

There is a trend which has already taken hold of several States and by all indications is gradually absorbing some of the remaining States. This is the granting of credit for physical education toward high school graduation. As a natural sequence to this trend, colleges and universities are beginning to grant entrance credit for high school physical education. Six states have already adopted this practice.

In meeting this trend, perhaps the most difficult problem confronting high school principals and physical directors is the organization of a suitable program of physical education for high school graduation and university entrance credit. Therefore, the proposed program is based upon the activities commonly practiced and offered by the universities and colleges in their required physical education and teachers' training courses. It is also based upon the theory that variety of activities promotes co-ordinations. The common practice of granting two periods a week for physical education and the problem of providing time for the junior and senior years have been considered in promoting a suitable program.

The Program

I. *Class Activities.* The regular class activities should include a list for both boys and girls and the class period should be utilized for intensive activity. The class work will be more or less formal, which will aid routine, economize time, and provide maximum activity. Lesson plans should be arranged with some thought to progression and may be based upon the following divisions, including other activities than those mentioned under these four divisions.

A. *Tactics.* Time 1/6 of the actual time (30 minutes of exercise of the average 45 minute class) or five minutes.
   1. Fundamental Marching with common and fancy combinations.
   2. Fundamental dancing steps.
   3. Figure marching.

B. *Free Exercises* (Calisthenics.) Time 1/6 of the period. Five minutes.
   1. Hand apparatus such as reeds, hoops, clubs, dumbbells, wands, skipping ropes.
   2. Elements of track and field, swimming, boxing, wrestling, basketball, etc., as exercise.
   3. Set drills for each month consisting of four or five well chosen exercises.

C. *General Activities.* Time 3/6 of the period, fifteen minutes.
   1. Apparatus.
   2. Stunts and contests.
   3. Tumbling.
   4. Boxing and wrestling.
   5. Swimming.
   6. Rhythmic activities.
   7. Giant volleyball (24″).
   8. Track and field events and individual athletic events.
   9. Participation in social mixers.
   10. Indoor and outdoor soccer.

D. Gymnasium games of low organization. Time 1/6 of the period, five minutes.
   1. Circle games.
   2. Relays.
   3. Contests and group games.

II. *After-School Activities for Both Boys and Girls.*

The after-school activities should be utilized for participation in competitive games and should include major and minor interscholastic sports; fall, winter and spring intramural events which may include related activities such as boy and girl Scouts, Four-H clubs, athletic associations, and hiking clubs. The activities under this division would be more or less formal.

A. Major Interscholastic Sports as an after school activity for boys only.
   1. Fall—Football.
   2. Winter—Basketball.
   3. Spring—Track and field.

B. Minor Interscholastic Sports as an after school activity for boys only.
   1. Fall—Cross country, soccer, tennis, golf, etc.
   2. Winter—Wrestling, swimming, gymnastics, volleyball.
   3. Spring—Baseball, tennis, golf, horseshoes, archery.

C. Intramural Sports as an after-school activity for both boys and girls.
   1. Fall—Including the minor sports and any additional activities desired, such as hiking, captain ball, pentathlon events.
   2. Winter—Including the minor sports and boxing and giant volleyball.
   3. Spring—Including the minor sports and playground ball, archery, horseshoes, hiking and badge tests events.

III. *Special Events.*

Special events should serve as a climax for the fall, winter and spring seasons and should involve large group participation. These events may be held on weekends, holidays or evenings.

A. Fall. Fall festivals, carnivals, pentathlons, costume parties.

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Theory and Practice in Folk Dancing

An outline of a course given at Stephens College, Columbia, Missouri, compiled and edited by Wilma D. Haynes, Director of Physical Education, Stephens College, cooperating with Elena Mygdal and Charlotte Anderson, former instructors in dancing at Stephens College

THE usual course of Folk Dancing taught in our elementary and secondary schools generally fails to give a student an appreciation of the richness which is so much a part of the background and folk lore of a people. Folk dances are taught as so many steps without a thought of the race characteristics, customs, climate and geography as affecting the dance.

The aim of this course is to give the students an appreciation of the growth of each particular dance. This can be done only by studying the temperament of the various folk through the study of geography, history, art, music and all the other enrichment material.

Method. The dances of each country are studied along with the performance of the dances. Each student is assigned one country on which she is to write a short resumé. The papers are read aloud in class, while the rest of the class take notes, ask questions and study the illustrations which are brought to class from such magazines as the *National Geographic* and *Asia.* Representative dances of this country are then performed and studied.

A term paper is required, wherein each student selects a country and discusses customs, history, climate and characteristics of the country.

A note book is also required. It contains material discussed in class, pictures of folk costumes and festivals, using the pictorial section of the Sunday Edition of the *New York Times* and other illustrated papers. Folk costume plates (see Bibliography) are added to the note book. Students meet three times a week for eighteen weeks.

A. Detecting time and type of music. (The following pieces were played.)

1. Blue Danube.
2. March Militaire.
3. Fan Fare.
4. Fox Trot.
5. Minuet.
6. Gavotte.
7. Mazurka.

Method:

1. Sitting on the floor, listen to the music and tap the time with the hands and feet.
2. Step the measures to the proper tempo.
3. Time spent depends on class ability.

Student Supplementary Reading:

Hofer, Mari Rulf—Children's Singing Games, Old and New.
La Salle, Dorothy—Rhythm and Dances for Elementary Schools.
Wilde & White — Physical Education — Iowa State Teachers College.
H'Doubler, M.—The Dance and Its Place in Education.

B. Define briefly:

1. Dancing.
2. Folk Dancing.
3. Rhythm.
4. Art.
5. Culture of a people.
6. Philosophy.
7. Psychology.
8. Science.
9. Religion.
10. Recreation.
11. Play.
12. Architecture.

Method:

1. Class recitation.

Student Supplementary Reading:

H'Doubler, Margaret—The Dance and Its Place in Education.
Ellis, Havelock—The Dance of Life.
Gardner—Art Through the Ages.
Hamlin—History of Architecture.
Kakuzo, Okakura—Ideals of the East.
Wells, H. G.—Outline of History.
Hyde—Five Great Philosophies.
Fairgrieve—Geography and World Power.

C. What is meant by the following musical terms?

1. Time.
2. Tempo.
3. Piano.
4. Retard.
5. Rubato.
6. Forte.
7. Melody.
8. Bass.

Method:

1. Demonstration with tapping of feet and clapping of hands.
2. Demonstration with the piano and with the tom tom.
3. Readings.

Student Supplementary Reading:

Wilde & White—Physical Training—Iowa State College.
Holmberg & Giard—Elementary Theory of Music.

D. Bound Geographically. (North, South, East, and West)

1. Germany.
2. India.
3. Norway.
4. Russia.
5. England.
6. Poland.
7. Czecho-Slovakia.
8. China.
9. Java.
10. Burma.
11. France.
12. Rumania.
13. Sweden.
14. Russia.
15. Ireland.
16. Hungary.
17. Spain.

Method:

1. Draw maps.
2. Class recitation.

Student Supplementary Reading:

Chicago Daily News—Almanac.
Fairgrieve—Geography and World Power.
Rand McNally—Maps.
Encyclopedia Brittanica.

E. Locate briefly:

1. Budapest.
2. Bucharest.
3. Vienna.
4. Saxony.
5. Brittany.
6. Constantinople.
7. Hongkong.
8. Oslo.
9. Siam.
10. Avignon.
11. Andalusia.
12. Ukraine.
13. Petrograd.
14. Edinburg.
15. Bavaria

Method:

1. Draw maps.
2. Class recitation.

Student Supplementary Reading:
Chicago Daily News—Almanac.
Fairgrieve—Geography and World Power.
Rand McNally—Maps.
Encyclopedia Brittanica.

F. Describe the following dance steps:
1. Polka.
2. Jig.
3. Mazurka.
4. Schottische.
5. Balance.
6. Three.
7. Five.
8. Seven.
9. Waltz.
10. Gavotte.
11. Morris Step.
12. Minuet.
13. Do Si Do.
14. Grand Right and Left.

Method:
1. Teacher demonstration and lecture.
2. Class participation.
3. Individual participation.
4. Note book.

Student Supplementary Readings
Hofer, Mari Rulf—Polite and Social Dances Preface.
La Salle, Dorothy—Rhythm and Dances for Elementary Schools.
Frost, Helen—The Clog Dance Book.
Knighton & Hillas.
Sharp, Cecil—The English Country Dances.
Wilde & White—Physical Training—Iowa State Bulletin.
Hinman, Mary Wood—

G. Differentiate between:
1. Ballet and Russian dancing.
2. Social and jazz dancing.
3. Tap, clog and soft shoe dancing.
4. Natural or interpretative and exotic dancing.
5. Character and folk dancing.
6. A waltz and a two step.

Method:
1. Demonstration and lecture (if teacher is prepared)
2. Class recitation.

Student Supplementary Reading:
Frost, Helen—The Clog and Character Dance Book—(2nd book)
Martin, John—Articles on the "Dance"—Sunday N.Y. Times.
Moses, Irene—Rhythm Action Plays and Games.
Chalif, Louis—Textbook of Dancing, Book I.

H. Identify:
1. Pavlova.
2. Isadore Duncan.
3. Ted Shawn.
4. Harold Kreutzberg.
5. Ruth St. Denis.
6. La Argentine.
7. Martha Graham.
8. Yvonne Georgi.
9. Michio Ito.
10. Doris Humphrey.
11. Mary Wigman.
12. Ronny Johansson.
13. Adolf Bolm.
14. Ruth Page.

Method:
1. Lecture.
2. Special notes.
3. Personal information from teacher and individuals.
4. Clippings and pictures from note book.
5. Advertisements from the managers of the dancers and from dance programs.

Student Supplementary Reading:
Sunday Edition New York Times.
Martin, John—Articles on the "Dance"—Sunday N.Y. Times.
Advertisements—Dance Recitals, N. Y., Chicago, K.C. and St. Louis papers.

I. Identify:
1. George V.
2. Mussolini.
3. H. R. H. Edward of Wales.
4. Queen Marie.
5. Victorio Emanuel III.
6. Henry Ford.

Method:
1. Reading interests.
2. Significance of these names with the present revival of past folk customs and dances.
Example—Queen Marie of Rumania sponsoring a revival of Rumanian folk dances.

Student Supplementary Reading:
Readers Guide for Henry Ford's Work in Reviewing American Folk Dancing.

J. Identify:
1. Helen Frost.
2. Cecil Sharp.
3. Elizabeth Burchenal.
4. Mari Hofer.
5. Gertrude Colby.
6. Havelock Ellis.
7. Margaret H'Doubler.
8. Marche Sisters.
9. Jacques Dalcroze.
10. Caroline Crawford.
11. Louis Chalif.

Method:
1. Readings.
2. Class recitation.
3. Clippings, pictures from note books.

Student Supplementary Reading:
Books written by these dancers.

K. Approach for the study of typical folk dancing of the various countries:
1. Culture of the nation.
a. Geography of the country.
b. Economic life pattern of the people.
c. Political life pattern.
d. Scientific life pattern.
e. Artistic life pattern.
f. Religious life pattern.
g. Ebb and flow of their civilization.
(Special emphasis on music, costumes, and outstanding folk characteristics.)

Method:
1. Readings for each country.
2. Term paper on a country.

Student Supplementary Reading:
Burton—The Religion of the World.
H'Doubler, Margaret—The Dance and Its Place in Education.
Ellis, Havelock—The Dance of Life.
Encyclopedia Brittanica.
Gardner—Art Through the Ages.
Hourticq—Art in France.
Hunter—Brief History of the Indian People.
Hyde—Five Great Philosophies.
Webster—History of the Far East.
Wells—Outline of History.

L. Method of experiencing folk dances which incorporate characteristics of the people.
1. Hear the national folk music.
2. Anticipate type of dance.
3. Read chorography of a typical national dance in one of the folk dance reference books and in such magazines as the Geographic, Asia, and other travel magazines.
4. Perform with your best understanding the dance read or taught.
5. Interpret the significance of the dance.
6. Deduce the differentiating characteristics of the particular type of national dance studied.

Method:
1. Class participation.
2. Individual participation.
3. Discussion.

Student Supplementary Reading:
Victor Records.
Magazines—(National Geographic, Asia, Health and Physical Education)
Folk Dance Books.

M. Contemporary Dancers.
1. Russian.
a. Pavlova.
b. Tisa Parnova.
c. Mihail Mordkin.
d. Adolf Bolm.
e. Louis Chalif.
f. Irma Duncan.

(Continued on page 52)

A Rental System for Administration of Athletic Clothing

By Frank Kleeberger

Professor of Physical Education, University of California, Berkeley

FOR many years students at the University of California enrolled in the required work in Physical Education were called upon to furnish their own athletic clothing and maintain this equipment in clean condition. This procedure resulted in the use of a great many types of clothing in various states of repair. It demanded constant checking by the instructors to force many of the students to keep this personal clothing even presentably clean. The spirit of economy, natural carelessness, and in some cases even superstition, prompted a sufficient number of men to use every device to avoid the laundering of their clothing with the result that the locker-room was pervaded with the standard gymnasium smell.

About 1914 the Department of Physical Education for Men decided to try an experiment aiming at the correction of these difficulties. Two standard gymnasium suits, costing a total of about $5, were required of each student enrolled in the prescribed work. These men were then called upon to turn their suits over to the Department on the plan that the suits were to be laundered and distributed each week from a central checking room without cost to the students. At the end of the year these suits were stored by the Department so that they would be available for the men returning to the University the following fall.

During the summer a $4 fee was instituted, to be paid by all men students entering the University who were subject to the Freshman and Sophomore requirements. This fee was to cover the purchase, upkeep, and laundry of gymnasium clothing for the period of four years of residence. Men returning to college who had previously stored two suits with the Department were exempted from this fee on the understanding that these suits were to be permanently surrendered and to become the property of the University. Everybody was happy. The plan actually saved money and trouble for the students, vastly improved the atmosphere of the locker rooms, and insured a uniform and cleanly appearance for all Freshman and Sophomore men. New clothing was purchased in such an amount as to provide, when added to the suits confiscated the previous year, a sufficient number of each of the garments to represent approximately one and a third complete outfits for each man enrolled.

THE plan met with no objection on the part of the students since it was apparent that they were under less expense with the University taking charge of their laundry than had been the case under the previous system. The fee of $4 represented the payment of 50 cents per half year for the four years of academic life and proved an exceedingly cheap service, while at the same time it made money for the "Gymnasium Suit Fund" so established. This was true for a variety of reasons, among the chief of which might be mentioned the fact that the University of California presents a dual system of sports administration for the physical education of the students in general—one presented by the University itself, and the other by a student corporation for the promotion of the highly specialized major athletic competitive program. Men especially capable in football, track, basketball, baseball, tennis, and crew, transferred their activities to the Varsity squads and were outfitted by the Associated Students, free of any cost to themselves, thus cutting down wear and tear on the Department's equipment. Academic mortality at the end of a year of enrollment life at the University of California is 5 per cent. Many of the students dropping out of the University failed to collect a refund on their original gymnasium suit fee. (See schedule of refunds.) Again, a large group of men having completed the Freshman and Sophomore years of required work either dropped out of physical activity altogether, were enrolled in major sports, or sought their physical recreation away from the University. All these factors had their effect in building up a surplus in the Gymnasium Suit Fund.

IN the meantime, the Department had instituted, about 1916, its new plan of physical education through the teaching of some sixteen different activities. The rental system proved exceedingly valuable in initiating this change in that it made possible the furnishing of some five different types of clothing, viz: fencing, wrestling, swimming, gym team, and the regular gymnasium suits, without any increase of the gymnasium suit fee. The rental system thus saved the student not only the expense of several different types of equipment, but also the greater expense entailed in the cleaning of the more elaborate equipment, some of which demanded special laundering and some, dry cleaning.

During the war period high prices caused a slight depression of the Gymnasium Suit Fund. However, as prices tended toward normal again the fund showed sufficient increase to enable the Department to elaborate the list of garments available to students until it was providing sweat shirts and sweat pants in addition to the regular outfits used by the students in the different sports. The fee of $4 continued to successfully finance the plan until 1926.

In 1926 the laundries in the Bay region combined,

causing an increase in the laundry costs of approximately 30 per cent. This addition to the expense of financing the plan, together with the fact that an increasing number of men were continuing their physical activities on a voluntary basis after completing the first two years of required work, while at the same time the Department was furnishing more elaborate equipment more expensive to launder, forced the University to increase the fee to $5 in 1929.

In this connection it should be stated that the fee has never been called upon to finance the clerical handling of the clothing in the way of checking in the soiled garments and distributing the clean. The University has for many years maintained a stockroom for the distribution of athletic equipment, such as baseballs, bats, basketballs, footballs, punching bags, etc., considered as laboratory equipment for the use of students in the activities courses. It has been found that clerks attending to this service, financed by the Department budget, have been able, with slight additional labor, also to administer the exchange of clean for soiled clothing.

Name ..... | ..... | .....
Print—Family name First given name Initial

GYMNASIUM SUIT FEE RECEIPT

Date..... Number..... Amt. $.....

Refund, Date ..... Amt. $.....

STOCKROOM RECORD

University of California Dept. of Phys. Ed.—Men

Master File Card for Permanent Record

Name ..... Locker No.....

University of California—Department of Physical Education

... pr. Tights and Supporter (wrestling or Gym.)
... Sweater Shirt
... pr. Cotton Gloves
... Long Pants
... pr. Athletic Hose
... pr. Sandals
1 Sleeveless Shirt
1 Short Pants
1 Supporter
1 Towel
1 pr. Socks (ankle)
1 Combination Padlock

LOCKER CARD

Suits and towels are property of the University. The student taking out same thereby assumes the financial responsibility.

I hereby accept this locker with the articles checked and agree to abide by the regulations posted on the bulletin board governing the use of suits, towels, and lockers.

Preserve this Card

.....
(Signed)

Date: August to December, 1929

Receipt Form in use for one Semester Only

University of California
Dept. of Physical Education

Locker-Suit-Towel Receipt

LOCKER NO. .....

Combination

Turn Left to .....
Turn Right to .....
Turn Left to .....
Turn Right to open.

Preserve this card—it is your receipt

NOTE.—In taking this suit and accessories you agree to the regulations printed on the back of this card as well as as those posted on the bulletin board.

Face of stub for the above receipt

SUIT AND TOWEL REGULATIONS

Suits and towels are the property of the University and the man taking out same assumes the financial responsibility. In case any items are lost the charges must be paid at the Comptroller's Office. The charges made will be based upon the value of the articles as indicated on the price list posted on the Department Bulletin Board.

Reverse of stub shown at left

Equipment signed from Stock Room on this slip due to-day.

Name..... Locker No.....

Article	No.	Article	No.
Basketball		Key to Hand Ball Court	
Ball		Set Boxing Gloves	
Bat		Whistle	
Fielder's Glove			
Football			
Catcher's Glove		Fencing Mask	
Mask		Fencing Foil	
1st Base Mitts		Fencing Glove	
Punching Bag and Gloves.		Skipping Rope	

Receipt Form used in issuing Equipment for One Day or Less

ITEMS OF EQUIPMENT WITH APPROXIMATE RETAIL VALUE:

Ankle socks, white cotton, a pair	$ .25
Athletic Hose, long woolen, a pair	1.40
Gym Pants, grey cotton shorts, special design and material, each	1.00
Baseball Pants, grey cotton, special design and material, each	1.65
Sweat Pants, standard grey, each	1.75
Sweat Shirts, standard grey, each	1.75
Jerseys, grey, long arm, wool	3.00
Sandals, wooden, bathing, a pair	1.00
Sleeveless Shirts, grey cotton, each	.85
Swimming Trunks, grey cotton, special design and material, each	.50
Supporters, grey cotton, special design and material, each	.55
Gym Tights, grey, full length, woolen, each	2.75
Wrestling Pants, grey, quilted knee, special design and material, each	2.50
Wrestling Tights, grey, long woolen, leather padded, each	6.25

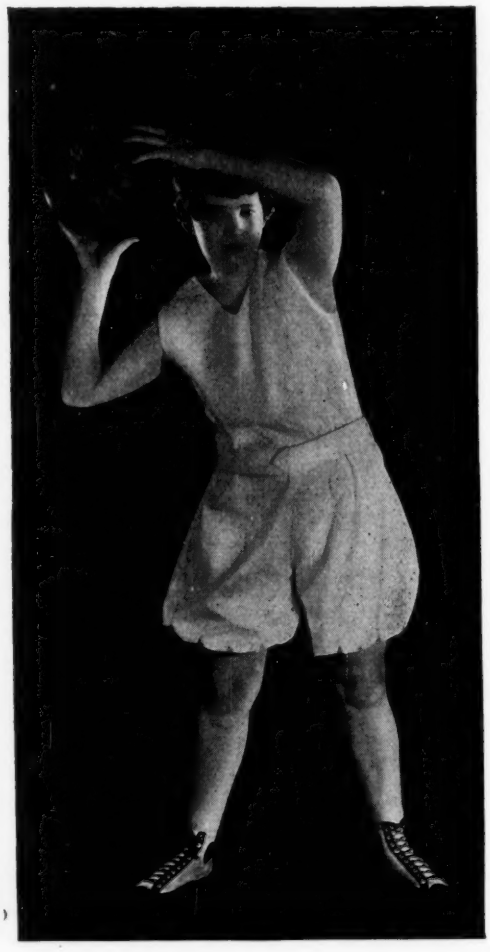
THE experience of the Department in the administering of this system of clothing and athletic equipment distribution has resulted in the adoption of certain types of clothing, card forms, regulations, fines, etc. The regulation gymnasium costume at the University of California consists of a sleeveless cotton shirt, cotton shorts, a specially designed cotton rubberless supporter, and a pair of cotton half-socks. A list of all the items of equipment with their approximate retail value is given later. Each locker in the gymnasium is provided with a complete outfit before the opening of the semester, and the student, after paying the necessary fee to the Comptroller, presents his receipt at the stockroom window and receives a locker card entitling him to the use of the suit which has been deposited in that locker. Students are privileged to turn in poorly fitting or used clothing at the stockroom window at any time and receive clean, correctly fitting garments in exchange.

ADMINISTRATIVE REGULATIONS AND FORMS

Gymnasium Suit Fee—"The amount of the gymnasium suit fee varies with the year of residence of the student concerned and covers the use, laundry, and repair of all types of gymnasium and athletic clothing, *with the exception of shoes,* for the entire period of residence. For Freshmen and Sophomores the fee amounts to $5; for Juniors who have not paid the gymna-

(Concluded on page 53)

Why "Lafayette Hygiene" Gym Togs *are Preferred* by Women and Girls



• • •

1. All materials are guaranteed fast colors.
2. Our garments are cut full and the excellent tailoring makes them fit better and wear longer.
3. "Lafayette" garments are guaranteed in every respect, and very moderately priced.

• •

We are makers of the following "Lafayette Hygiene" *garments:* Middy Blouses, Sport Shirts, Blouses, Skirts, Camp Suits, one-piece Gym Suits, Dancing Suits, and Double Adjustable Gym Bloomers, Knickers and Shorts.

•

If you are unable to secure our garments at your store, communicate with us, and we shall be glad to advise the nearest dealer.

Sold at leading department stores and sport goods stores

Your Guarantee

We hereby guarantee 'Lafayette Make' Garments to give satisfactory wear and service. We stand back of and authorize the retailer in assuring prompt and satisfactory adjustments, should any cause for complaint or dissatisfaction arise.

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News from the Eastern District Society

DR. J. F. Williams, President of the Eastern District Society, American Physical Education Association, has appointed a committee charged with the responsibility of preparing a page of news items from the Eastern District for the JOURNAL OF HEALTH AND PHYSICAL EDUCATION. The committee personnel represents influential members from various state associations.

Chairman, Clifford L. Brownell, Ph.D., Teachers College, Columbia University, New York City.

Maine—Roland H. Cobb, Professor of Physical Education, Bowdoin College, Brunswick.

New Hampshire—Elizabeth M. Murphy, R.N., Supervisor of Health, State Board of Education, Concord.

Massachusetts—Marjorie Bouvé, Director Bouvé School of Physical Education, Boston.

Connecticut—C. J. Prohaska, M.D., Director Physical Education and Health, State Board of Education, Hartford.

Rhode Island—Neva L. Langworthy, Rhode Island College of Education, Providence.

New York—W. W. H. Mustaine, Supervisor of Physical Education, The State Education Department, Albany.

New Jersey—A. G. Ireland, M.D., Director Physical Education and Health, State Department of Public Instruction, Trenton.

Pennsylvania—Helen J. Graeff, Secretary Pennsylvania Society of Physical Education, 1907 North 6th St., Harrisburg.

Delaware—J. W. Boston, Secretary Delaware Society of Physical Education, Milford.

Maryland—H. S. Callowhill, Secretary Maryland Society of Physical Education, Baltimore.

Eastern District Committees

It is customary for the Eastern District Society to hold a convention bi-annually at the time the National meets in the West. This consideration in the past has resulted in an interim of two years during which the Eastern District practically ceases to exist as a professional society. In order to keep alive interest in professional problems and promote professional spirit in the Eastern groups, the President of the Eastern District has formed six committees on needs as follows:

1. *Committee on Needs in Public Elementary Physical Education*—Chairman, Mr. Franklin G. Armstrong. Mr. Orlo Chamberlain, Mr. Colba Gucker, Miss Dorothy Hutchinson, Miss Ethel M. Norton, Miss Grace C. Moses, Miss Katherine Quinn, Miss Bertha Schools.
2. *Committee on Needs in Junior and Senior High School Physical Education (Boys)*—Chairman, Mr. Grover W. Mueller. Dr. Harry B. Burns, Mr. Eugene Hofmeister, Dr. Allen G. Ireland, Mr. Herman J. Norton, Mr. Frederick Prosch, Mr. Carl Schrader.
3. *Committee on Needs in Junior and Senior High School Physical Education (Girls)*—Chairman, Miss Florence A. Somers. Miss Louisa May Greeley, Miss Mary Heffernan, Miss Elizabeth McMahon, Miss Ruth Mershon, Miss Alma Porter, Miss Therese Fowdermacher.
4. *Committee on Needs in Men's Physical Education in Colleges*—Chairman, Mr. Roland H. Cobb. Professor William J. Cromie, Mr. Norman Fradd, Mr. R. J. H. Kiphuth, Mr. Allison Marsh, Professor A. I. Prettyman.
5. *Committee on Needs in Women's Physical Education in Colleges*—Chairman, Miss Dorothy Ainsworth. Miss Eline von Borries, Miss Alice Belding, Miss Mildred Howard.
6. *Committee on Needs in Professional Training in Physical Education*—Chairman, Miss Ruth Elliott. (Not completed).

These committees will report at Christmas time and will doubtless bring together some very valuable material that may serve as a nucleus of the Eastern District meeting of 1931, which is to take place at Trenton, New Jersey.

Maine

During the past two years the department of physical education at Bowdoin College and the State Department of Education have conducted a series of meetings designed to promote the program of physical education in the Pine Tree State. Speakers from Bowdoin addressed state and local teacher conventions, luncheon clubs, and parent-teacher associations in the interest of physical education.

Annual physical education conferences have been attended by school superintendents, principals, coaches and teachers. The interest in these conferences has been so great that plans are under way to continue this practice during 1930-31.

The University of Maine offers courses for men and women who wish to teach health and physical education in the public schools of the state.

Women from the Universities of Maine and New Hampshire together with representatives from Bates and Colby Colleges have organized annual play days. Each of these institutions of higher learning will serve as host every four years.

Colby College dedicated its new athletic building in conjunction with commencement last June.

New Hampshire

The state normal schools at Plymouth and Keene have provided unusual recreational facilities for their students at camps situated on nearby lakes. At Plymouth the students have enjoyed the facilities of the spacious and comfortable school camp at Loon Lake only three or four miles from the normal school. At Keene a large plot of land on the shores of Wilson Lake has been bought by the Students' Association. The boys in the industrial arts department are to build a camp on the shore of the lake. The science department is planning to erect a dam in a little arm of the lake and build an aquarium for the use of students in science. At both schools fine bathing beaches are part of the school camp sites.

As a result of the cooperation of school officials and interested citizens there has been developed recently near the Concord High School a large and spacious playing field. There are facilities for baseball, track, football and other games.

Recently there has been dedicated at Hampton a large playing field, made possible through the generosity of local citizens. This field is situated where it is easily accessible for both elementary and secondary school children.

Massachusetts

Several of the Massachusetts state normal schools planned play days for the small high schools. The purpose of these festivals was to awaken an interest in this type of play activity in order that eventually the high schools can stage a series of play days among themselves.

During the past season the University Extension Department of the State Department of Education offered several courses to teachers in the field of education. One course dealt with health teaching, another with administration and methods of physical education. These courses are accepted for credit in several nearby colleges.

The Massachusetts Agricultural College is providing new equipment for its physical education department. A teacher

training course in physical education is to be established. This will be the first opportunity offered by the State to train men for this field.

At a recent meeting of high school principals the State High School Athletic Association voted to limit participation on school teams to three years in the three year high schools and to four years in the four year high schools. Those students failing in subjects and returning to the school over and above the years prescribed will be ineligible to participate in varsity sports.

On August 1, 1930, the Bouvé School, Incorporated, and the Boston School of Physical Education were consolidated under the charter of the Boston School of Physical Education. Miss Marjorie Bouvé is the president of the combined school which is known as the Bouvé-Boston School of Physical Education. An affiliation with Simmons College has been arranged whereby a four year course leading to a Bachelor of Science degree will be offered. The present three year course is to be continued. There will be also an accredited course in physiotherapy.

Connecticut

According to Dr. A. B. Meredith, until recently Commissioner of Education in Connecticut, "The normal school is in a key position in the development of the school health program. Teachers must have, first of all, the sympathetic attitude toward health that will enable them to make it a vital and absorbing subject to children.... In Connecticut normal schools the first step in the training of teachers relates to the health of the teacher and takes place before or at matriculation. We believe that good health is the fundamental personal qualification of a teacher, or, to state it differently, that the good teacher is first of all a healthy teacher. The basic characteristics of a good teacher most frequently stated are, a wholesome personality, cheerfulness, patience, fair mindedness, enthusiasm. All of these are conditioned by physical health. Our prospective students are, therefore, required to meet certain definite health standards.... Thus, we attempt to insure at the start a healthy body of prospective teachers. More important than the preliminary examination, however, is the follow-up conducted by the instructors in health and physical education. Each report is gone over carefully, and as soon as possible after the opening of school each student is called into conference for a discussion of personal health matters."

The following data indicate the status of teacher training entrants over a period of five years:

	1924	1925	1926	1927	1928	Total
Accepted	301	336	359	387	353	1736
Conditioned	167	245	285	167	184	1048
Rejected	14	15	13	11	30	83

Rhode Island

During the year 1929-1930 the State Physical Education Association devoted its energies toward securing a broader concept of the field of health and physical education. Four successful meetings were held. These were addressed by such men as: Dr. John J. Mahoney, Professor of Education, Boston University; Mr. Clifford "Happy" Goldsmith, National Dairy Council; Dr. C. J. Probaska, Supervisor of Physical Education and Health, Connecticut State Board of Education; Mr. Grover W. Mueller, Director of Health and Physical Education, Philadelphia; and Mr. Emil Rath, Dean of the Normal College of the American Gymnastic Union, Indianapolis. The meetings were attended by an enthusiastic group of teachers throughout the state.

The program in Providence specifies two gymnasia for each new building as follows:

Elementary schools—two gymnasia—each 40′x60′.
Junior high schools—two gymnasia—each 45′x50′ or 65′ to 70.′
Senior high schools—two gymnasia—each 60′x90′.

In the larger schools, two smaller gymnasia, each 25′x40′ are added for individual corrections.

All junior and senior high schools are equipped with locker and shower room facilities for a maximum group of seventy-two pupils.

New York

In the Rochester pre-vocational school the physical fitness index (P.F.I.) is being used with the intelligence quotient (I.Q.) in classifying students for pre-vocational training. This is done in order that children may not be placed in courses which require a high degree of strength or endurance until they are physically qualified for it. Here is a practical application of the hygiene of instruction which schools may adopt in academic as well as in vocational and other courses.

In the Gloversville high school, pupils who present physicians' excuses of unfitness for the regular program of physical education are assigned to rest periods. Special facilities have been provided for supervised rest with a teacher in charge.

A very interesting and instructive "Archery Day" was held at Fredonia State Normal School. The normal students' archery club, consisting of 150 members, invited Miss Olive H. Besco, archery expert of Buffalo, to give a demonstration and to instruct them in the history and use of the bow and arrow. The day was concluded with a banquet in honor of the guest instructor.

A recreational organization known as the "Faculty E Association" has been formed at the East High School in Buffalo. The programs are in charge of faculty officers, with the assistance of physical educators acting as honorary chairmen of the group. Activities include tennis, golf, hiking, horseback riding, swimming and winter sports. Minimum standards of participation have been established for which suitable recognition is given. Several members of the faculty have received the 4-inch E, presentations being made by the school principal.

New Jersey

On Saturday evening, May 17th, the New Jersey Physical Education Association gave a reception and dinner in honor of Dr. Frederick W. Maroney who resigned as Director of Health Education in the Atlantic City public schools to accept the presidency of the Arnold College for Hygiene and Physical Education. Dr. Maroney has made a host of friends in New Jersey, a large number of whom gathered to express their love and esteem. His services in New Jersey cannot be easily estimated. As State Director he gave physical education a start that placed New Jersey among the leading states. Next—as Director of Health Education in Atlantic City—he established a program of health and physical education which stands as a model for all public school systems. During these years his counsel has been frequently sought, and his advice has always been good. New Jersey realizes it is losing a leader, but the impress of his work and the inspiration of his ideals will remain. Henceforth, his vision and his message will be carried throughout the nation.

Pennsylvania

Wilkes-Barre, a city of 100,000 population, has carried on an extensive program of supervised athletics in the grades. A recent check-up showed that out of 5,000 6th, 7th, and 8th grade boys and girls, over 1250 played on regular school teams during the basketball and volley ball season. In addition to these 1250 boys and girls, many more played on second or third teams at each building, so that perhaps at least one half of all grammar grade pupils were reached through this intramural program.

The Public School Athletic League of the city is divided into five divisions. These divisions are in turn made up of leagues of from 5 to 8 teams each. In each division there are one or more game centers (grade school gymnasium), at which

(Concluded on page 50)

Soccer Questions

By MISS MARIAN KNIGHTON
BRONXVILLE, NEW YORK
CHAIRMAN, WOMEN'S SOCCER GUIDE

The Women's Committee on soccer rules have formulated the following true and false, multiple choice and completion tests in order to give a better understanding of the game to beginners. The correct answers are to be found at the end of this article.

True - False

1. Carrying by the goal keeper is taking more than 2 steps while holding the ball.
2. A goal may be scored from a throw-in.
3. If the ball touches the referee and is thus kept from going out of bounds it is still in play.
4. A player must be careful about off-side when a throw-in is being taken.
5. The person taking the throw-in must stand with both feet on the touch line.
6. Knocking-on is striking or bumping the person who has the ball.
7. A goal may be scored direct from a corner kick.
8. A goal may be scored direct from a free kick awarded for charging an opponent.
9. A goal may be scored direct from a free kick awarded for off-side.
10. During a penalty kick the players may take up their positions anywhere outside the penalty area or the goal line.
11. For second breach of kick-off made by player on team not kicking off a free kick shall be awarded the opponents.
12. The interval at half time shall not exceed 10 minutes.
13. A goal keeper may juggle the ball.
14. It is not necessary for a player to wait a whistle before taking a free kick, goal kick, or a throw-in.
15. When the Goal Keeper "carrys" the ball, the opposing side is awarded a penalty kick.
16. Metal plates are not allowed on soccer shoes in the women's game.
17. The officials for a soccer game are: a referee, two umpires, two linesmen, a time-keeper, and a scorer.
18. The official game consists of two 30 minute halves.
19. The kick-off may be kicked in any direction.
20. No player may approach within 6 yards during the kick off.
21. The ball is in play if it rebounds from a goal post, cross bar, or corner flag into the field of play.
22. All players shall be at least 6 yards away during a throw in.
23. Propelling the ball with the top of shoulder is a foul which calls for a free kick by the opponents.
24. The umpire may award a free kick for any rough or dangerous conduct.
25. If the ball bounds back from the goal post to the player who has just taken the corner kick, it is a foul if she kicks it again.

Multiple Choice

1. A penalty kick is awarded to the attacker when (1) a defender plays the ball behind her own goal line (2) when a defender, within her own penalty area, intentionally infringes upon Rule IX (which refers to personal contact and handling ball) (3) when the defending goal keeper handles the ball.

(Concluded on page 60)

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Rhythmical Activities.
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Athletic Games.

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Relay Races.
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Special Notice

"The Football Quizzer" for 1930 by William J. Sheeley, published last year by the author, now bears our imprint. This little book is designed to aid coaches and players to better understand the football rules. The 1930 Edition has been entirely rewritten in accordance with the new recodified rules. The manuscript was received early in August and the book came "off press" September 2nd.

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Around the Country With J. E. Rogers

Major P. S. Prince, State Director of Physical Education, Delaware, reports as follows:

"In the Sussex County Track and Field Day we had 2166 competitors, including 26 dodgeball teams and 11 volley ball teams. In Kent County we had 1881 competitors, including 22 dodgeball teams and 9 volley ball teams. In New Castle County we had 2497 competitors with 28 dodgeball teams and 19 volley ball teams. These field days were among the most successful we have ever had in this state."

* * *

W. R. Hillebrand of the Luther Burbank Junior High School in Los Angeles, California, has worked out a splendid set of achievement activities in the Boys' Department of Physical Education. The home room achievements are as follows:

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1. Touch football. (Elimination schedule)
2. Soccer. (Elimination schedule)
3. Basketball. (Elimination schedule)
4. Handball. (Elimination schedule)
5. Horseshoe. (Elimination schedule)
6. Noon Baseball. (Round Robin schedule)

Second Semester Activities

1. Home Room track testing.
2. Track Meet (Inter-Class) A, B, C—D, E, F
3. Baseball. (Elimination schedule)
4. Swimming Meet. (Inter-Class) A, B, C—D, E, F
5. Handball (Elimination schedule)
6. Horseshoe. (Elimination schedule)
7. Noon Baseball. (Round Robin schedule)

* * *

Winston Salem, N. C., where L. B. Hathaway has been developing an excellently rounded program of health and physical education, has created a remarkable city-wide interest in tennis. Winston Salem provides 71 splendidly built tennis courts. So much do the school authorities believe in playgrounds, that they have levelled school grounds at the cost of $6000 and $8000 per play space.

* * *

During the month of May, 1930, 65,000 High School boys in New York City participated in a new program of athletic and hygienic tests. Those who pass all the requirements in scholarship, health, posture, and athletic performance receive the Physical Fitness Badge of the Public Schools Athletic League.

* * *

The first unit of the three units planned for a women's physical education building at the University of Alabama, Tuscaloosa, has been completed. Miss Ethel J. Saxman, head of the Physical Education for Women has charge of the development of the program and building. The first unit completed is an attractive two story structure of brick and limestone. It is fireproof throughout with excellent provisions for heating, lighting, and ventilation. The new gymnasium opens on an eight acre athletic field. When completed, the University of Alabama will have for its young women the finest physical education facilities in the South.

* * *

A new gymnasium for men and a new field house have been erected in the last two years at the State College of Washington, Pullman. These new structures have made possible a greatly enlarged program of physical education. A chapter of the Red Cross Life Saving Corps has recently been installed; intramural athletics through the use of the field house in inclement weather have been reorganized on a much larger basis; fencing is rapidly becoming popular as is handball and swimming, while boxing and wrestling have taken on new life. The orthopedic work is well cared for. Progress is being made in testing motor ability. All this is being reflected in the increased enrollment in the professional training division.

Tennessee is forming a State Physical Education Association under the leadership of A. W. Hobt, University of Tennessee.

* * *

Henry Foster, head of the Department of Physical Education for Men at the University of Washington, Seattle, is developing a splendid four year course in training physical education majors. Mr. Roland E. Belshaw and Mr. John Torney, who are now doing graduate work in physical education at Columbia, will become members of the staff next fall. Mr. Belshaw will supervise the intramural athletic program while Mr. Torney will have charge of aquatic activities.

As a phase of the coming summer session program, they plan to conduct a demonstration playground in connection with their play leadership courses. Two full time experts will supervise the program with assistance from various related departments of the University. This should furnish an excellent laboratory for teachers in training.

* * *

C. M. Miles, State Director of Physical Education in Florida has helped organize a state council composed of all the different agencies interested in health. There are many. The first annual meeting of the Florida State Health Council was held at Gainesville. Mr. Miles presided. It was a very successful meeting.

* * *

Several of the state directors have appointed State Councils of Physical Education. Mr. Thompson of Michigan has had a State Council for some years. Recently Mr. Upton of West Virginia organized a state council. This council is composed of ten members. They will act in an advisory capacity and will have at least two annual meetings in addition to various subcommittee meetings on special subjects. The council is as follows:

Arthur V. G. Upton, State Director of Physical Education, Chairman.
Miss Ruth Perry, Concord State Normal, Secretary.
Dr. Carl P. Schott, West Virginia University.
Miss Grace M. Griffin, West Virginia University.
Claude E. Crumb, Marshall College.
Miss Charlotte Berryman, Fairmont State Normal School.
H. L. Burns, Charleston Public Schools.
G. A. Dowling, Wheeling Public Schools.
Carl T. Nessley, Parkersburg Public Schools.
E. W. Dunkley, Shady Springs District Schools.
George D. Brock, West Virginia State College (Negro).

* * *

The officers of the new Kentucky Physical Education Association are:

Harold T. Taylor, Louisville Public Schools, President.
Miss Louise Staub, University of Kentucky, Vice President.
Miss Dudley Ashton, Louisville Normal School, Sec'y-Treas.
T. E. McDonough, Eastern State Teachers College, Chairman, Executive Committee.

* * *

There is a nation-wide interest in the Virginia Five Point System. Last year 90 per cent of the total state school enrollment had a physical and health examination and about 80 per cent corrected one or two of their physical defects. This splendid achievement was largely due to the five point system. The five point child is one who has cleared himself of all physical defects in regard to height-weight, eyes, ears, nose and throat. A certificate, signed by the state superintendent of public instruction and state commissioner of health, with the gold seal of the State is presented to the Five Point child at graduation and May Days. It is one of the greatest honors a child can receive during his school career.

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ARTHUR H. STEINHAUS
Director of Research, Y.M.C.A. College, Chicago

Concerning the Physiology of Work and Overwork

The series of which this article is one is an attempt to present and interpret to physical educators the results of some recent researches in Physiology which to the writer seem of importance to Physical Education. The articles cannot lay claim to scientific thoroughness. They must rely on their simplicity and essential accuracy to commend them to the reader. The bibliographical references should serve as starting points for any who desire to equip themselves with fuller information.

ONE thing seems to be certain in muscle physiology, namely that lactic acid is produced in the exercising muscle. How lactic acid causes contraction, if it does, is not yet known. It had better not be called a waste product, but rather a link in the chemic machine of contraction. Everyone seems to agree further that this "link" must be removed after it has played its part if the muscle is to continue functioning or is to recover. The work of Meyerhof and of A. V. Hill has led to the formation of the present theory that this acid is temporarily neutralized in the muscle to be later removed partly (about one-fifth) by oxidation to CO_2 and H_2O and partly (about four-fifths) by reconversion to a larger molecule which can again supply energy for subsequent contractions. A natural question is, does this lactic acid stay in the muscle or does it get into the blood? In heavy work it most certainly enters the blood. Some workers (Barr and Himwich) have actually shown that the lactic acid produced in a very active muscle may be carried to comparatively inactive muscles and there changed. In other words, in a runner the arm muscles may help by disposing of lactic acid produced in the legs. *But does moderate work throw lactic acid into the blood and if so how does it affect other body processes?*

W. H. Owles has recently studied this problem at Oxford. He analyzed blood from an arm vein of men engaged in walking or cycling. At first he found no increase in the blood lactic acid. But as the exercise became more strenuous a point was reached beyond which increasing amounts of lactic acid appeared in the blood. This critical metabolic level, so called, varied with individuals and the nature of the work. Thus for example, for one individual studied this point was reached when the oxygen intake was at 1.8 liters per minute. Concurrent with this appearance of lactic acid in the blood they found also a reduction of the CO_2 in the blood. This means that less carbon dioxide can now be carried by the blood, there will be less in the expired air, and we may say that the elimination process is beginning to break down. Can anything be done to raise this critical level? Fortunately the excellent work of E. C. Schneider already answers this question. He and G. C. Ring studied this same question by analyzing expired air, particularly for its CO_2 content. They use the term "crest load" for that amount of work which is paralleled by the highest percentage of CO_2 in the expired air. They found that the amount of CO_2 increased with the increase of load up to a certain point and then with further increase of work actually less CO_2 was thrown off.

Thus the studies of Schneider and of Owles are remarkably corroborative, though their approaches differed greatly. But Schneider showed further that with a moderate training program this "crest load" might be increased. Measured on a bicycle ergometer the amount of work done at "crest load" was increased in one case from 2000 to 7000 ft. lbs. per minute, an increase of 250 per cent in work capacity. Their oxygen figures are very similar to those of Owles. Recently Gemmill, Booth and Pocock at Johns Hopkins reported the physiologic changes brought on in a period of training by moderate exercise on the bicycle. Their results fit most aptly into the picture outlined by the earlier workers. After their subjects became "trained" they could do the same amount of work as before with greater efficiency, with less heavy breathing and with a slower heart rate. They are led to conclude that the improvement was all in the respiratory and cardiac mechanisms.

Summary. We may conclude from this trio of independent reports which so nicely amplify each other that the trained man differs from the untrained man in his ability to supply adequate amounts of oxygen to the active muscles *so that the reduction of lactic acid shall take place on the spot of its production.* Even the trained man has his limit. When this is reached the lactic acid gets into the blood and here displaces CO_2 thus reducing the blood's efficiency in carrying this waste product to the lungs for elimination. No doubt the heart and blood vessels are the central figures. Mostly we "train" them, to a lesser extent the muscles, and still less, if at all, the lungs.

Barr, D. P. and H. E. Himwich. "Studies in the Physiology of Muscular Exercise." II. Comparison of Arterial and Venous Blood Following Vigorous Exercise. Jour. Biol. Chem. 1923, 55, 525.
Gemmill, C., W. Booth and B. Pocock. Muscular Training I. The Physiological Effects of Daily Repetition of the Same Amount of Light Muscular Work. Amer. Jour. Physiol. 1930 XCII, 253.
Owles, W. H. Alterations in the Lactic Acid Content of the Blood as a Result of Light Exercise and Associated Changes in the CO_2 combining Power of the Blood and in the Alveolar CO_2 Pressure. Jour. Physiol. 1930, 69, 214.
Schneider, E. C. and G. C. Ring. The Influence of a Moderate Amount of Physical Training on the Respiratory Exchange and Breathing During Physical Exercise. Amer. Jour. Physiol. 1929. XCI, 103.
Schneider, E. C. A Respiratory Study of the Influence of a Moderate Amount of Physical Training. Res. Quar. 1930. Vol. 1, No. 1, p. 1.

Wanted—Information

The A.P.E.A. is very desirous of having a complete list of state physical education associations, their officers and where possible, their membership. Many requests are constantly being received at the offices for this information. It is important for the National Association to keep in close touch with the state associations. The new Committee on the Constitution is planning largely to make the states important units of representation on the national council. Therefore this information will be very necessary to the development of future plans, and we urgently request that the various state officers send their names, etc., to Box 362, Ann Arbor, Michigan.

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308 W. 59th St., New York City

Solving Gymnasium Storage Problems

By D. V. TRAPP

(Concluded from the September issue)

Double Tier Lockers (*Continued*)

Double tier lockers can be recessed where wall space will permit. They also provide sufficient storing space in connection with basket rack installations for general gym suit storage purposes. An illustration of this type of installation is shown in Figure 26.

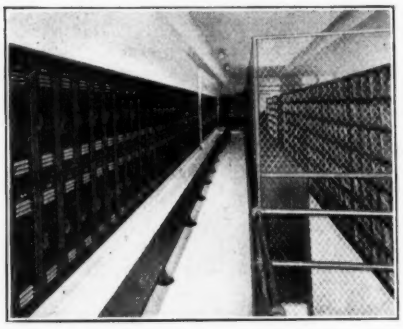


Fig. 26—Single and double tier lockers and basket racks in gym room, Marquette High School, Milwaukee, Wis.

Where visibility of contents is desired, double tier lockers can be furnished with a combination of both louvred and round hole perforated doors as shown in Illustration 27. This makes for added ventilation, and is used instead of the old type of wire mesh door.

Double Tier Shoe Lockers

In some of the newer schools, especially in Chicago, Des Moines, and elsewhere, double tier lockers are being utilized to good advantage for the storage of gym shoes. These lockers are recessed in the gymnasium walls or in the walls of alcoves built adjoining the gymnasium.

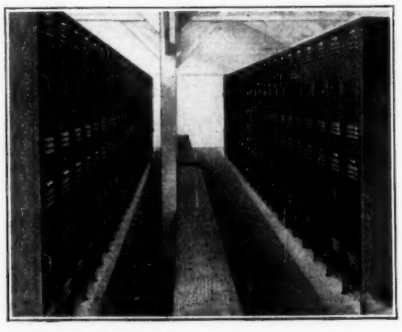


Fig. 27—Double tier lockers with standard louvre and round hole perforations for ventilation.

Where lockers are recessed in the gymnasium, it is usually advisable to have them furnished with a flush lift type latch and with the doors round-hole perforated instead of standard louvred. With a flush lift type latch and the round hole perforations, it leaves the front of the lockers free of all protruding parts and makes them safe as there is nothing extending out against which the student may bump or strike.

In the double tier shoe lockers, the shoes openings are 6″x6″ and the capacity is from 10 to 18 openings per locker, according to its size. The usual dimensions of double tier lockers when arranged for shoe storage are 12x12x30″, 12x15x30″, 12x12x36″, 12x15x36″, 18x12x36″, 18x15x36″. The first two sizes have ten 6″x6″ openings; the next two, 12; and the last two, 18 openings to each locker for shoes.

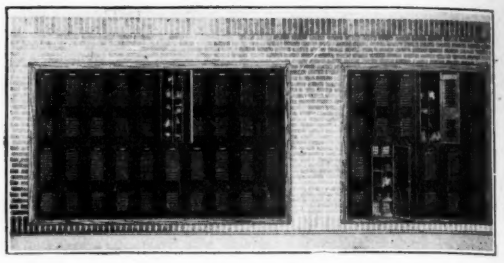


Fig. 28—Double tier shoe lockers with flush lift latch recessed in gymnasium. (Used in Des Moines schools)

When desired, the backs of the shoe lockers can be perforated for attaching to ventilating stacks, etc.

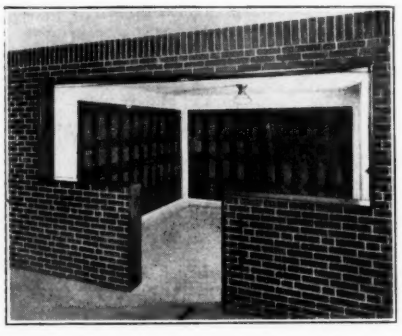


Fig. 29—Double tier shoe lockers with flush lift latch recessed in alcove.

Illustration 28 displays an installation of double tier shoe lockers recessed in a gymnasium in a Des Moines school. This installation would have been better with the doors round-hole perforated instead of full-louvred. Illustration 29 shows a typical alcove installation of gym shoe lockers. Round-hole perforation in the doors would have also increased the desirability of this installation.

Single Tier Shoe Lockers

Shoe lockers can also be furnished in single tier arrangement for recessing in a gymnasium wall, etc., as shown in Illustration 30. Single tier shoe lockers can also be furnished in single door and double door types. The double door type is shown in Illustration 31.

Fig 30—Single tier shoe lockers recessed in gymnasium. (Used in several Chicago schools)

The size of shoe compartment in a single tier locker is 6″x 6″ and there are from 20 to 48 openings per locker according to the size of the locker. While 6″x6″ is the accepted size for shoe compartments, other sizes

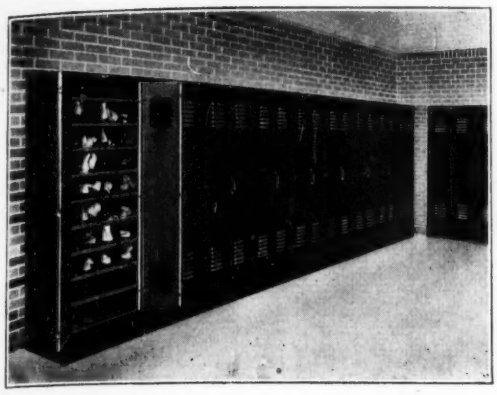


Fig. 31—Double door, single tier shoe lockers with closed bases. Beaumont High School, St. Louis, Mo.

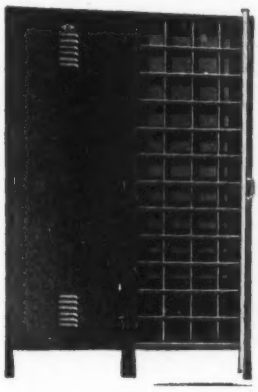


Fig. 32—Two single tier shoe lockers.

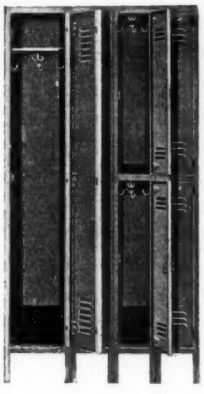
Fig. 33—Four double tier shoe lockers.

that work out in multiples can be furnished. In other words, should it be desired to have larger openings they could be furnished in accordance with the available space inside the locker.

Illustration 32 shows a group of two single-tier, single-door shoe lockers, each locker having 48 shoe openings or shoe storage compartments.

Shoe lockers can be furnished with legs, for free standing in single or double row arrangement; or without legs for recessing or mounting on cement bases.

Illustration 33 shows four double tier shoe lockers. Each shoe locker contains 18 shoe compartments.



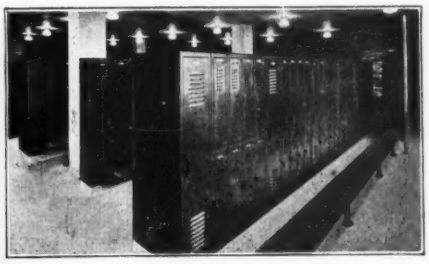


Fig. 34A—An installation of gymnasium locker units, Sherrard School, Detroit, Mich.

Fig. 34—(Left) A gymnasium locker unit for a group of six users.

Special Gymnasium Lockers

The modern trend in gymnasium lockers is toward a combination arrangement as shown in Illustrations 34-34A. For want of a better name, this type is usually termed "Gymnasium Locker Units." A complete unit consists of one standard single tier locker in connection with multiple tier lockers, two or three high (depending on size) in sections, one, two, three or four wide. This arrangement can be made to suit the requirements of the particular gymnasium by adding small compartments as required.

Padlocks are most practical to use with gymnasium type lockers. The equipment consists of one hat shelf in large compartment. Small compartments have none. All compartments have one double prong ceiling hook and three or more single prong side hooks (depending on the size of the locker). Various combinations consisting of single tier lockers, double tier lockers, in two or three high, and multiple tier lockers can be made up.

Method of Use

The usual method of use when standard gymnasium locker units are in service is as follows: the large single tier or coat compartment locker is numbered No. 1 and the small double tier lockers or multiple tier lockers (double tier lockers are preferred) are lettered starting at the top, A, B, C, etc., and are divided into six, eight, or more groups. All pupils in group A enter the gymnasium at one time. The one assigned to locker No. 1 takes his gym suit from locker A and places his street clothing in the large coat compartment, locker No. 1, attaching the padlock.

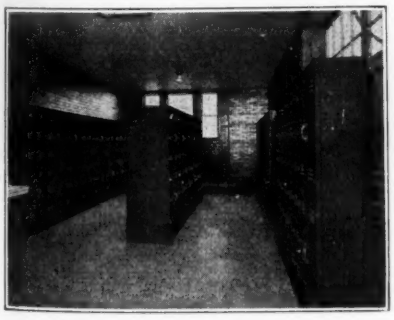


Fig. 35—Boys' gymnasium locker room, Muessel School—South Bend, Indiana.

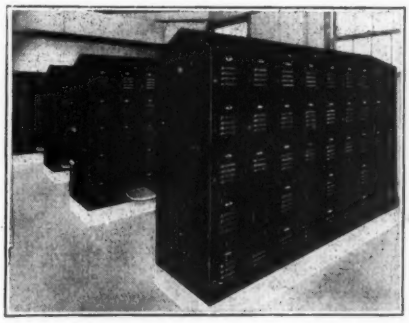


Fig. 36—Special gym lockers. U. S. Grant High School, Portland, Ore.

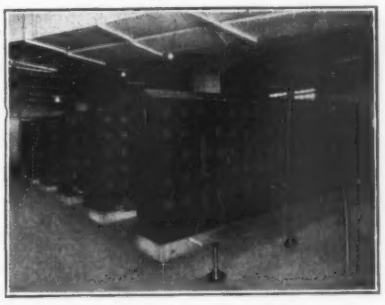


Fig. 37—Special gym lockers. Benson Technical High School, Portland, Ore.

When leaving, the pupil replaces the padlock on locker A and leaves the large coat compartment locker No. 1 unlocked for pupils of group B.

Illustrations No. 35, 36, and 37 show some efficient arrangements for using double tier lockers in connection with multiple tier and single tier lockers. In Illustration 35, you will notice there are three multiple tier lockers for each double tier locker. The upper three of the multiple tier lockers correspond with the upper tier of the double tier lockers, while the lower three multiple tier lockers correspond with the lower double tier lockers in each section.

In Illustration 36 there are seven of the multiple tier lockers to one of the coat compartments. This arrangement will work out to the best advantage, however, when smaller pupils are the users.

In Illustration 37, there are 13 of the multiple tier lockers to one of the large single tier coat compartments. This illustration has the lockers with the sloping tops and set on cement bases, the same as shown in Illustration 36. This installation is likewise best adapted to small pupils.

Multiple Tier (Box) Lockers

Multiple Tier (Box) or small compartment lockers as they are sometimes called, have a wide field of usefulness. They are especially adapted to gymnasium requirements and can be furnished in single row for arrangement along the walls or in double row or back to back arrangement. They admirably and economically fill a need for small storage spaces for such items as gymnasium shoes, gym suits, etc.

Multiple Tier (box) lockers come in tiers three or more high and as many lockers wide as may be required or the space permits. The multiple tier locker doors can be furnished by the manufacturer, either louvred, perforated with round holes, or without any openings for ventilation, as may be required.

Illustration 38 displays an installation of multiple tier (box) lockers which are built five high, and in single row arrangement.

Illustration 39 displays multiple tier (box) lockers in double row arrangement. These are also five lockers high.

You will notice that nearly all of these installations displaying multiple tier (box) lockers are furnished with the doors standard louvred for ventilation.

In Illustration 40 is shown an installation of multiple tier lockers eight high. These lockers are round-hole perforated and are used in the gymnasium of a Junior High School in Trenton, N. J. One of the lockers is assigned to each pupil for the safekeeping of gymnasium shoes, bloomers, and whatever is used for gymnasium use.

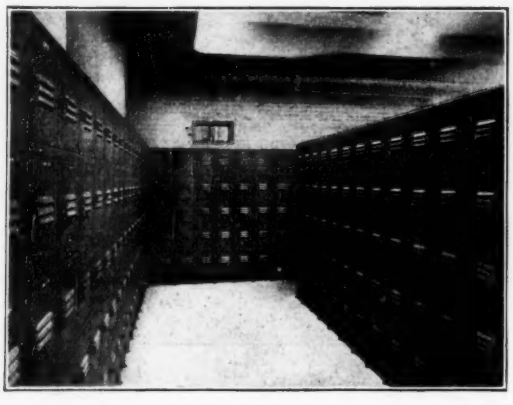
Fig. 39—Multiple tier (box) lockers (double row). Princeton, Ill., High School.

In this school a quantity of master lockers, size 12x12x36" are used in connection with the multiple tier installation. The gymnasium multiple tier (box) lockers are equipped with padlocks which are shifted to the large master lockers when the different classes are to go on the gymnasium floor. If you will examine the photograph carefully, you will notice that the padlocks are missing on some of the small multiple tier lockers. These padlocks are on the master lockers, and the users of the multiple tier lockers are at work or play in the gymnasium. When a pupil returns and gymnasium is over, he will remove his street clothing from the master locker, take the padlock with him, put his gym togs in the multiple tier (box) locker, and place the padlock thereon.

A variation from this plan for utilizing multiple tier (box) lockers would be found in the use of wire baskets in the multiple tier lockers in which to store the clothing and other articles.

Fig. 40—(Right) Special multiple tier (box) lockers. Junior High School No. 3, Trenton, N. J.

Fig. 38—(Below) Multiple tier (box) lockers (single row). Eau Claire, Wis., High School.



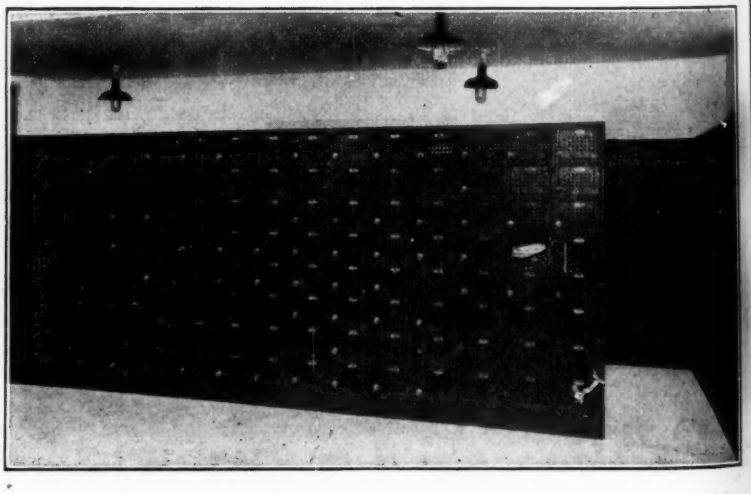


Fig. 41—Gymnasium basket rack (skeleton type) with regular legs.

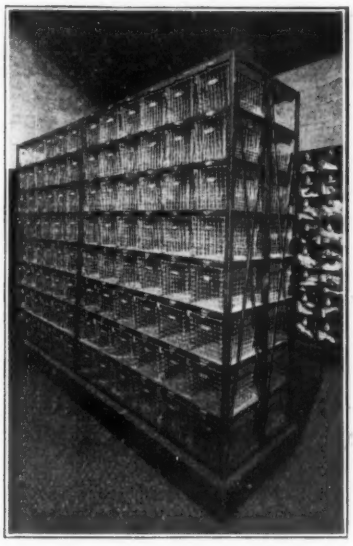


Fig 42—Gymnasium basket truck.
Fig. 43 — (Left) Gymnasium basket racks, 6 wide by 8 baskets high (on cement base) (double row and single row).

In any of the plans for gymnasium uses of multiple tier lockers or baskets, the following is the key to the arrangement: If there are 600 pupils in a school, you would provide 600 multiple tier lockers, 600 wire baskets, or 600 of both, depending on which system is used. If the largest gymnasium class consists of 50 pupils, then you would provide 50 of the large master clothing lockers.

Gymnasium Basket Racks and Trucks

Another plan, which is favored by many, is the use of steel racks and wire baskets instead of multiple tier (box) lockers. This system is perhaps a little cheaper in cost and gives the advantage of complete ventilation; and, at the same time, makes the contents of the baskets visible for inspection at any time.

Illustration 41 shows a single row, skeleton type, basket rack, with baskets in place. This rack has a capacity of thirty baskets and consists of steel shelves with angle uprights, basket separators, and padlock hasps which permit locking of the baskets in place.

Where the basket type lockers are used, there are three methods of operation: self-service, class group service, and attendant service. In the self-service method, baskets are equipped with padlocks; the individual unlocks the baskets, removes the gym clothes, and transfers the padlock to one of the large lockers which is to be used for his street clothes while he is taking gym work.

In the class group method the baskets are kept in a rack, which is fitted with casters so it can be used as a truck. Illustration 42 displays a Basket Truck which is built with solid ends and in double row arrangement. This truck has a capacity of sixty baskets. The casters on the truck permit the attendant to bring out at one time all the baskets for a class. Lockers for street clothes are assigned as the baskets are issued. Confusion is likely to arise with this system if the individuals desire to use the gymnasium at irregular hours.

The most satisfactory system, where it can be afforded, is attendant service. Here the baskets are kept in the racks under the supervision of an attendant who issues with the basket a key for the locker which is to receive the street clothes.

Basket racks are furnished in both types, with or without legs. They can either be set in single row arrangements or built for double row arrangements as shown in Illustration 43. In this illustration, the racks are furnished without legs and are set up on a cement base. There are four racks in the group in the foreground. Each rack has a capacity of 48 wire baskets.

Fig. 44—Gymnasium basket racks, 5 wide by 6 baskets high (on cement bases). Double row arrangement.

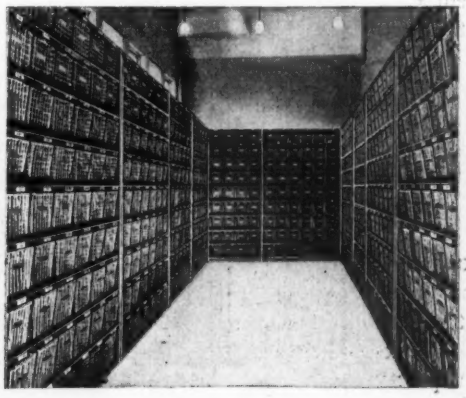


Fig. 45—Gymnasium basket racks, 6 wide by 9 baskets high, with short legs. Single row arrangement.

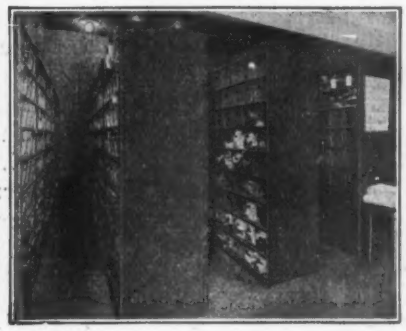


Fig. 46 — Gymnasium basket racks with solid ends. Double row arrangement.

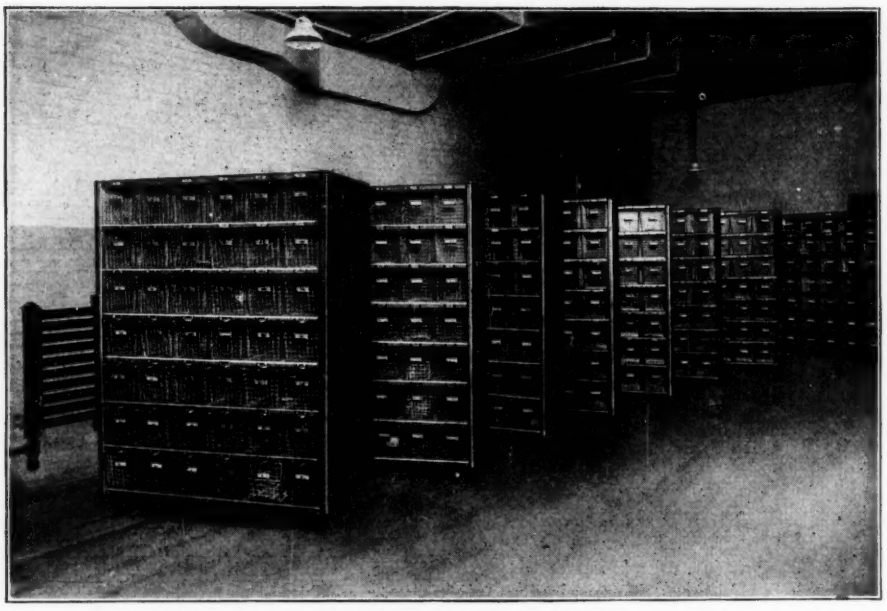


Fig. 47—Basket trucks. Capacity 84 baskets to each truck.

Illustration 44 shows groups of basket racks in double row arrangement, six racks to the group. These racks are without legs and are set on cement bases in the gymnasium locker room. Each of these racks has a capacity of thirty baskets. Both illustrations 43 and 44 show racks of skeleton type construction.

Illustration 45 shows basket racks with regular legs, set against the walls in the gymnasium basket rack room. This illustration shows ten of the racks in this room. Each rack has a capacity of sixty baskets.

Illustration 46 shows a group of gymnasium racks built in double row arrangement with solid ends. The solid ends make for more rigidity, but add to the cost of the installation. The racks in this picture are built with regular legs, and are for use in gymnasium rooms where an attendant serves the user.

When absolute security is necessary, basket racks can be furnished with doors and solid ends and backs. A number of school executives find such equipment very satisfactory; but on an average it is too expensive. The same service can be obtained from an installation of multiple tier (box) lockers, using the wire baskets in the lockers without having the racks.

Illustration 47 shows a number of basket trucks as used in connection with a large school gymnasium in Paterson, N. J.

You will note that the basket trucks are all double row arrangement, and have caster equipment which consists of two stationary and two swivel casters. The trucks are made in various heights with a capacity of sixty to eighty-four baskets each.

The usual standard overall height of basket racks is 61 inches, 71 inches, and 81 inches, and trucks, 65 inches and 75 inches. (See Illustration 48 for floor plans of Basket Storage Rooms.)

Wire Baskets

The wire baskets used in connection with these basket racks and trucks, wherever the basket system is in vogue, receive very rough treatment; therefore, it is desirable and quite necessary to give considerable attention to the design and construction of any baskets you may desire to purchase in connection with your installation. Baskets formed with square wire mesh are considered stronger than those formed in diamond shape. Wire mesh baskets are superior to metal boxes perforated with round holes when the advantage of light weight, strength and durability are considered.

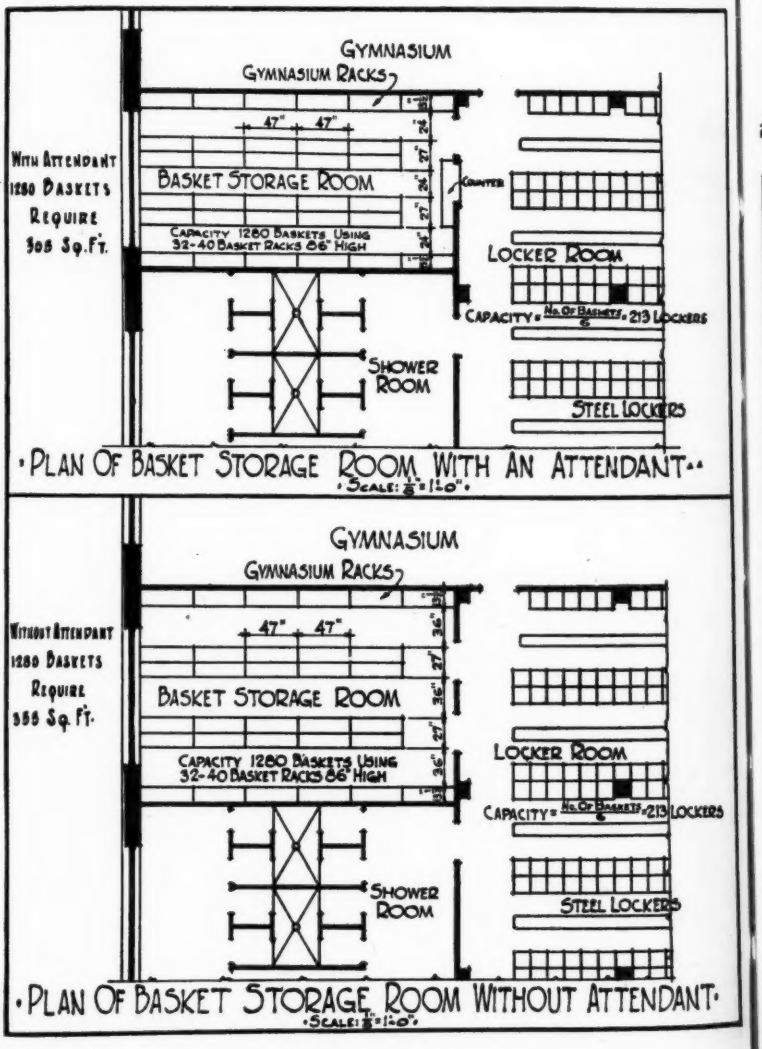


Fig. 48—Plans of basket storage rooms.

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Made of 1 inch square mesh, No. 15 gauge wire, with 3/16 inch top frame, and 1/8 inch diagonal braces. To prevent rusting, baskets should be finished with a heavy coating of tin after manufacture, and should be designed with a padlock loop in top frame to hold the basket in line in front of shelf on rack or truck when padlock is attached. A tinned number plate is to be placed on one end approximately 2 inches from top edge or thereabouts for identification purposes.

The standard sizes of wire baskets are usually 8½″ wide, by 13″ deep, by 8½″ high for the small; or 11½″ wide, 13″ deep, 8½″ high for the larger ones. These sizes will meet the average requirement in schools, clubs, and colleges.

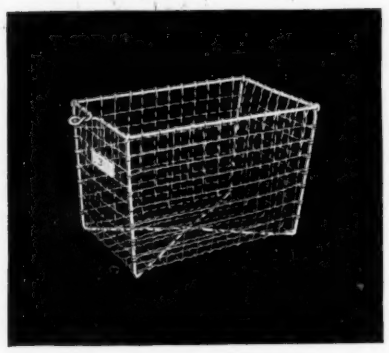

Fig. 49—A properly designed wire basket.

Illustration 49 shows a very desirable basket that has met with the approval of athletic and gymnasium directors in various localities.

Locker Room Bench Tops and Iron Bench Pedestals

A gymnasium locker room is not considered complete without a sufficient number of benches for the users.

Bench Tops: Yellow pine seems to be the most popular wood for locker benches and can usually be supplied by various manufacturers. Bench tops should be carefully sanded, with corners and edges nicely rounded, and then finished with a coat of shellac.

Ordinarily, tops are furnished 6′, 8′, 10′ and 12′ lengths, either 8″, 10″ or 12″ wide, and 1½″ to 2″ thick. (The dimensions for width and thickness are nominal and the finished tops are slightly under these sizes.)

Fig. 50—Locker room bench with iron pedestals.

Fig. 51—(Left) A sturdy iron pedestal for attaching to locker room bench top and floor.

The stationary type of locker room bench is usually preferable to the portable type of bench, for a number of obvious reasons. Many accidents are caused by the upsetting of a bench when pupils stand on the portable type to reach into their lockers. With the stationary type, which is fastened securely to the floor, this objection never arises; and besides there is not the wear or tear on a stationary bench top to compare with the rough use and abuse the portable type receives.

When it is desired to use bench tops and bench pedestals careful consideration should be given to the design of the pedestals themselves.

Iron Pedestals: A type of pedestal which has met with much favor is made with heavy cast iron base, the top approximately 7″ in diameter, and has a strong tubular column 1 5/8″ in diameter. There are holes in the base and top of the pedestal for attaching to floor and bench tops. The pedestal itself can be finished in black Japan or other color to harmonize with the decorative scheme and design. Black is usually preferred, owing to the fact that it does not show dust and mop marks so readily as colors. The standard over-all height of the pedestal should be about 16½″, but shorter or higher ones can be obtained to meet individual requirements.

As a rule, pedestals should be placed 1′ from each end of bench top and not more than 5′ apart. It is desirable, when placing orders, to give the sizes of benches and quantities of pedestals required in order that the manufacturer can meet your requirements with the least delay.

Illustration 50 shows a 10′ bench top with three iron pedestals. Illustration 51 shows an iron pedestal that will meet the average requirement. This pedestal is strong and inexpensive, and will wear for a period of years. It can be securely anchored to the bench top and the floor.

Key Cabinets

In gymnasiums where a large number of locker keys must be kept it is usually found advisable to store these keys in a compact form, where they will be available to the proper party. Losses due to misplaced or stolen keys can practically be eliminated thereby.

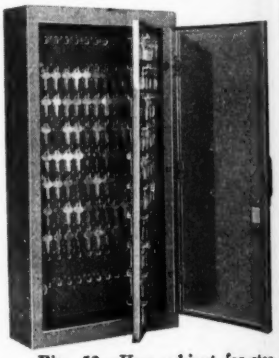

Fig. 52—Key cabinet for storage of locker keys.

A cabinet along the line of the one shown in Illustration 52 will be found very effective for this purpose. This type of cabinet can be furnished in sizes with capacities from 100 to 800 locker keys each. The back, swinging leaf, and also the door can be equipped with hooks. The hooks have a capacity of approximately five locker keys each, and a number is stamped above each hook to correspond with the number on the locker. This facilitates the handling of keys.

Key Cabinets of this type can be either recessed in the walls (built-in) or placed against the wall (portable) to meet building conditions. A choice of finishes can be provided to harmonize with the decorative color scheme. The small cabinet is usually 15″ wide, by 4½″ deep, by 30″ high, which has, without the swinging leaf, a capacity of 100 hooks, and with the swinging leaf, a capacity of 300 hooks. Hooks on the door can be added which will give a capacity of 100 more.

The next larger size is 24″ wide by 4½″ deep by 30″

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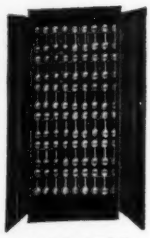

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high, which, without the swinging leaf, has 200 hooks; and which with the swinging leaf, has 600 hooks; and which with hook panel on the door, giving a capacity of 200 more, brings the capacity up to 800 hooks.

Specifying and Buying Steel Lockers

In the foregoing, we have given consideration to the various types and designs of lockers applicable to gymnasium requirements. We will now consider the actual preparation of specifications for purchasing. This includes the proper specifying of what is wanted, and the method of asking for prices or bids.

Use of "Open" Specifications

The use of general or "open" specifications similar to the following, which have been used quite successfully by some of the leading school boards, architects, and other large users of lockers in obtaining prices on their locker equipment, will do the most to secure for all purposes, high grade lockers that have an established market value. They will insure bids on a fair, competitive basis.

These "open" specifications cover single and double tier lockers, multiple tier lockers, gymnasium basket racks and basket trucks, etc. They will be found complete for all general purposes.

General or "Open" Single and Double Tier Locker Specifications

Doors: Shall be of No. 20 gauge steel adequately reinforced and stiffened with "tubular" reinforcements at each vertical edge, with hemmed flanges at top and bottom edges and welded at corners; or, may be of No. 16 gauge steel flanged on all four edges and welded at corners. Steel for doors shall be full cold-rolled, patent-level enameling stock, or equivalent, free from surface irregularities and capable of taking a high grade enamel finish.

Door Frame: Uprights shall be 1″x1″x⅛″ hard steel angles, or approved construction of equal strength. Cross members shall be 1½″x¾″ No. 14 gauge formed steel channels, joined to uprights at each end by two 3/16″ countersunk head rivets or by welding, or may be of steel angle or other approved construction of sufficient strength to form a substantial rigid frame.

Body: Sides, backs, tops, bottoms and shelves shall be no lighter than No. 24 gauge cold-rolled steel.

Locking Device: Shall be simple, substantial and tamperproof, preferably of the "concealed, one-piece" type, with automatic locking bar release and rubber silencers, operated by stamped steel (not cast) straight lift handle, latching automatically when the door is closed without lifting or operating the handle. There shall be three locking points on both single and double tier lockers, the points of contact to be directly opposite the hinges. All doors shall be provided with a padlocking attachment consisting of a plate with hasp attached to the door adjacent to a hole in the handle so the handle cannot be operated when padlock is affixed. (Unless hereinafter specified padlocks are not included in these specifications.)

Locks: All lockers shall be furnished with master keyed flat key (grooved key or paracentric may be specified if desired) locks of standard manufacture with two keys for each lock (if combination locks are called for they should be of a size and type interchangeable with the standard flat key locks). (Padlocks either of flat key type or combination type can be furnished when specified.) Locks attached without exposed bolt heads are preferred.

Hinges: Shall be adequately reinforced and of the type known as full-looped, with five knuckles, and shall be at least 1½″ in width, attached to the door frame with two 3/16″ countersunk head rivets and to door with two 14-20 binder head machine screws and nuts. If "butt" hinges are used, they shall be sufficiently larger and heavier to afford equal strength. All hinges shall be so positioned that pins cannot be driven out. There shall be at least three hinges on single tier locker doors, and three hinges on double tier locker doors.

Legs: Where called for, legs shall extend at least 4½″ clear below cross member of door frame. Front legs shall be integral with frame and be provided with detachable adjustable floor plates and the rear legs shall be individually adjustable for height. (When specified on lockers with legs, closed bases are to be furnished for the fronts and ends of locker sections. These shall be no lighter than No. 20 gauge cold-rolled steel and so attached as to present a neat appearance, preferably without any exposed bolt heads. (NOTE: When lockers are to be placed on raised bases, they should be furnished without legs.)

Tops: All lockers shall have flat tops (unless sloping tops are specified).

Ventilation

(Standard—Doors Only)

Doors shall have standard louvre perforations, not less than six louvres near top and bottom of single tier lockers, and three near top and bottom of double tier lockers.

(Alternates—Doors Only)

(a) Doors shall have a block of forty-nine ½″ round holes on 1″ centers, or equivalent, near top and bottom.

(b) Doors shall have louvre perforations their full length.

(c) Doors shall have ½″ round holes on 1″ centers, or equivalent, their full length.

(Special Ventilation—When Specified)

(a) Single Tier Ventilated Types.

(1) Tops (or backs near top) of lockers shall have a block of forty-nine ½″ round holes on 1″ centers.

(2) Bottoms (or backs near bottom) of lockers shall have a block of forty-nine ½″ round holes on 1″ centers, or equivalent. Louvres near bottom of doors shall be omitted.

(b) Double Tier Ventilated Types.

(1) Tops and Intermediate Tops (or backs near top) of lockers shall each have a block of forty-nine ½″ round holes on 1″ centers, or equivalent. Louvres shall be omitted from doors except at bottom of lower doors.

(2) Bottoms and Intermediate Bottoms (or backs near bottom) of lockers shall each have a block of forty-nine ½″ round holes on 1″ centers, or equivalent. Louvres shall be omitted from doors except at top of upper door.

(3) Single Row Double Tier lockers shall be provided with a 3″ ventilating space behind regular back connecting with an air duct beneath lockers (air duct by others). Ventilating space shall be formed by extending ends and tops 3″ beyond nominal dimensions at back and providing an extra back, or equivalent arrangement. Regular backs shall have a block of forty-nine ½″ round holes on 1″ centers, or equivalent, near bottom of each locker. Louvres near bottom of doors shall be omitted.

(4) Double Row Double Tier lockers shall be assembled in single row arrangement providing a 3″ ventilating space between backs of lockers. This space shall be formed by extending the tops and ends 3″ beyond nominal dimensions at the back, or equivalent arrangement, and shall be connected with air duct beneath lockers (air duct by others). Backs of lockers shall have a block of forty-nine ½″ round holes on 1″ centers, or equivalent, near bottom. Louvres near bottom of doors are to be omitted.

NOTE: Adjustable damper plates can be furnished with round hole perforations when specified.

Equipment: Single tier lockers shall have one hat shelf approximately 9″ below top of locker, double tier lockers none. All lockers shall have one double prong ceiling hook and at least one single prong side hook on each side and back, preferably of the type that are attached with two screws.

Finish: All lockers shall be finished with olive green baked enamel. (Other colors at reasonable extra cost, when specified.) Door handles and padlock attachments dull black baked enamel. Coat hooks shall be of Cadmium or Udylite finish or otherwise thoroughly rust-proofed. All screws and nuts shall be rust-proofed by the Parker process. Where screw heads are visible on outside of locker, they shall be of the slotless or binder-head type.

Number Plates: Each locker shall have a polished brass or aluminum number plate with black filled depressed numbers not less than 7/16″ high; plates to be attached with split rivets.

Workmanship: Shall be of strictly high grade character throughout. All like parts shall be standard and interchangeable, accurately formed and correctly fitted.

Because of the increased demand for lockers recessed in the corridor walls, the following are typical specification clauses for the various standard arrangements, viz:

Metal Top and End Strips: Lockers are to be placed in recesses provided for them, and the locker contractor is to furnish recess closing strips to cover the gap at the ends and across the top of each locker section. These strip are to be made of No. 16 gauge full cold-rolled, patent leveled special enameling steel approximately 3″ wide so attached to present a neat smooth finish, preferably with concealed joint clips where top strips and end strips join together.

Wood Top and Metal End Strips: Lockers are to be placed in recesses provided for them, and the locker contractor is to furnish recess closing strips to cover the gaps at the ends of each locker section. These strips are to be made of No. 16 gauge full cold-rolled, patent leveled special enameling steel approximately 3″ wide so attached to present a neat smooth finish. Wood recess closing strips are to be furnished to cover the gaps across the top of each locker section, by the general contractor.

Wood Top and End Strips: The lockers are to be placed in recesses provided but the gaps at the ends and across the top of each locker section are to be covered by wood moulding not included in these specifications.

General or "Open" Multiple Tier (Box) Locker Specifications

Doors: Shall be made of not less than No. 16 gauge steel, flanged on all edges. Steel for doors shall be full cold-rolled, patent leveled enameling stock, or equivalent, free from surface irregularities and capable of taking a high grade enamel finish.

Door Frames: Uprights shall be 1″x1″x⅛″ hard steel angles or approved construction of equal strength. Top and bottom cross members shall be 1½″x¾″ No. 20 gauge formed steel channels, joined to uprights at each end by two 3/16″ countersunk head rivets or by welding; or may be of steel angle or other approved construction of sufficient strength to form a substantial rigid frame.

Body: Sides, backs, tops, and bottoms shall be no lighter than No. 24 gauge cold-rolled steel.

Locking Device: Shall be simple, substantial, and tamper-proof, preferably with neatly formed stamped steel (not cast) straight pull curl handle. This shall be combined with padlocking attachment consisting of a plate with hasp attached to door, adjacent to similar plate attached to frame so door cannot be opened when padlock is affixed. (Unless hereinafter specified padlocks are not included in these specifications.) When doors are closed, spring clips or other approved arrangement shall keep them shut.

Locks: All multiple tier (box) lockers shall be furnished with master-keyed flat key (grooved key or paracentric may be specified if desired) locks of standard manufacture with two keys for each lock (if combination locks are called for, they should be of a size and type interchangeable with the standard flat key locks). (Padlocks either of flat key type or combination type can be furnished when specified.)

Hinges: Shall be of the type known as full looped with five knuckles and shall be at least 1½″ in width, attached to the door frame with two 3/16″ countersunk head rivets and to door with two 14-20 binder head machine screws and nuts. If "butt" hinges are used they shall be sufficiently larger and heavier to afford equal strength. All hinges shall be so positioned that pins cannot be driven out. There shall be at least two hinges on all box locker doors.

Legs: Where called for, legs shall extend at least 4½″ clear below cross member of bottom door frame. Front legs shall be integral with frame and be provided with detachable adjustable floor plates and the rear legs shall be individually adjustable for height. (When specified on lockers with legs, closed bases are to be furnished for the fronts and ends of locker sections. These shall be no lighter than No. 20 gauge cold-rolled steel and so attached to present a neat appearance, preferably without any exposed bolt heads.)

NOTE: When lockers are to be placed on raised bases, they should be furnished without legs.

Tops: All multiple tier (box) lockers shall have flat tops (unless sloping tops are specified).

Ventilation

(Standard—Doors Only)

Each door shall have not less than three louvre perforations near center of door.

(Alternate—Doors Only)

Each door shall have a block of forty-nine ½″ round holes on 1″ centers, or equivalent, near center of door.

(Special Ventilated Types—when specified)

(a) Each back shall have a block of forty-nine ½″ round holes on 1″ centers, or equivalent, in center of each compartment.

(b) Tops and intermediate tops shall have a block of forty-nine ½″ round holes on 1″ centers, or equivalent, near center of top.

(c) Bottoms and intermediate bottoms shall have a block of forty-nine ½″ round holes on 1″ centers, or equivalent, near center of bottoms.

NOTE: Combinations of above types of ventilation can be furnished when specified.

Equipment: No hooks or shelves included unless specified.

Finish: All multiple tier (box) lockers shall be finished in olive green baked enamel. (Other colors at reasonable extra cost, when specified.) All screws and nuts shall be rust-proofed by the Parker process. Where screw heads are visible on outside of locker they shall be of the slotless or binder-head type.

Number Plates: Each box locker shall have a polished brass or aluminum number plate with black filled depressed numbers not less than 7/16″ high; plates to be attached to door with split rivets.

Workmanship: Shall be of strictly high grade character throughout. All like parts shall be standard and interchangeable, accurately formed and correctly fitted.

General or "Open" Gymnasium Basket Rack Specifications

Uprights: Shall be open or "skeleton" type with 1″x1″x⅛″ hard steel angles or equivalent front and rear, punched for attaching shelves and gussets. (Closed or "solid" type with No. 20 gauge cold-rolled steel between upright members can be furnished when specified.) Upright members shall not be more than 5½′ on centers.

Corner Gussets: (Furnished with skeleton type construction only.) Shall be No. 20 gauge steel punched for attaching to uprights and shelves at ends and rear of open or "skeleton" type sections.

Basket Separators: Shall be wing type made of not less

than No. 20 gauge special enameling steel bolted to under side of shelves, making individual compartments.

Shelves: Shall be of not less than No. 20 gauge special enameling steel adequately reinforced and having a wide flange at rear to serve as a back stop for baskets.

Padlock Hasps: Shall be of not less than No. 16 gauge steel formed to provide a secure means of locking the baskets in position.

Backs: Shall be open or "skeleton" type to allow for maximum air circulation. (Closed or "solid" type with no less than No. 20 gauge steel between uprights can be furnished if specified.

Number Plates: Each basket opening shall have a polished brass or aluminum number plate with black filled depressed numbers not less than 7/16" high, plates to be securely attached to the shelves.

Bolts and Nuts: Shall be rust-proofed by the Parker process. All outside bolt heads shall be of the slotless or binder-head type.

Finish: Racks shall be finished with olive green baked enamel. (Other colors at reasonable extra cost, when specified.)

Wire Baskets: Shall be made of No. 15 gauge wire woven on 1" square mesh, reinforced with 3/16" wire around top and ⅛" wire at upright corners and diagonally across bottom. Baskets shall be provided with loop for padlock attachment and tinned number plates (brass number plate with black filled depressed numbers at extra cost, if specified) and finished with heavy coating of tin after manufacture. Standard sizes 8½" wide x 13" deep x 8½" high; or 11½" wide x 13" deep x 8½" high.

Sizes of Racks: (Racks may vary to accommodate 30 to 48 baskets each.)

Workmanship: Shall be of strictly high grade character throughout. All like parts shall be standard and interchangeable, accurately formed and correctly fitted.

General or "Open" Gymnasium Basket Truck Specifications

Uprights: Shall be full 1"x1"x⅛" hard steel angles or equivalent, punched for attaching shelves and solid end panels. Upright members shall be spaced not more than 6½' over all.

Ends: To be closed or "solid" type, with No. 20 gauge cold-rolled special enameling steel, bolted between upright members.

Dividers: Truck shall be 27" deep overall, with No. 20 gauge cold-rolled special enameling steel, solid lengthwise divider, making 13½" deep basket openings on either side of truck.

Shelves: Shall be of not less than No. 20 gauge cold-rolled special enameling steel adequately reinforced with 1¼" flanges front and rear. Bottom shelf to have 1"x1"x⅛" angle reinforcements bolted inside of flanges, front and rear.

Casters: Each truck shall have four roller bearing casters (two swivel casters at one end and two stationary casters at the other), wheels not less than 3⅛" in diameter. Casters shall be securely bolted to No. 16 gauge reinforcing plate attached to bottom shelf—said plate to be 6½" wide and to extend entire depth of truck at each end; or construction of equivalent strength.

(Open specifications on Basket Separators, Padlock Hasps, Number Plates, Bolts and Nuts, Finish, Wire Baskets and Workmanship, same as for these items which are included for Basket Racks.)

Sizes of Trucks: Trucks may vary to have a capacity of 60 to 84 baskets each.

Erection of Lockers

The problem of locker erection often times seems perplexing to school executives and others who may not be informed as to the various methods used by the locker manufacturers in the installation of lockers.

The most economical method is to ship the lockers "knocked down" for erection at the point where the lockers are to be used.

The actual "setting-up" and placing of the lockers can be handled in various ways.

The work may be handled by pupils under the direction of the purchaser. This plan has been applied in various schools, and has proven quite successful and profitable to the pupils who did the work on a piece rate basis and at an economical cost to the school.

Another plan is to have the lockers erected by local non-skilled labor, under the supervision of the purchaser, either working on a straight hourly basis or on a piece rate.

A third plan is to have the lockers erected by local non-skilled labor on the open shop plan, but under the direct supervision of an erection superintendent supplied by the locker manufacturer. Where this plan is used, the expenses of the erection superintendent must be paid by the school and are usually considered in the cost of the lockers. This may amount to as much as several hundred dollars on an installation made some distance from the factory.

Another plan used by manufacturers is to have the installation supervised by a representative or erection superintendent from one of their sales offices located in various principal cities. This is practically the same as plan three.

A fifth plan is to have the lockers erected by union labor. This is more costly and is necessary only in a few of the larger cities.

A sixth plan would be to have the lockers shipped "set up," ready for placing in the proper rooms or corridors. This method has the disadvantage of a higher freight rate which often overbalances the resultant saving that may otherwise be obtained. Also, erection charges on lockers at the manufacturers' plant are often considerably higher than the same work done locally and supervised by the school authorities.

Owing to the simplified construction and accuracy of all parts of leading locker manufacturers' products, the work of assembling is very easy and can generally be handled by the purchaser with non-skilled labor at the minimum cost, and without inconvenience.

In concluding this article, too much emphasis cannot be placed on the value of selecting, at the outset, the right type and size of locker to fit the individual requirements of each school building. The services of a locker engineer should be used to help prepare locker floor plans and layouts. When asking for bids, you should have definite quantities and specifications, and then, when the bids are open and you are actually considering the purchase of locker equipment on a competitive basis, allow sufficient time for the locker representative to demonstrate the adaptability of his firm's product to your needs. Last, but not least, be sure you have taken the necessary time to investigate each locker manufacturer's former work and then you can know pretty well what they will do in supplying you with lockers.

Women's Gymnasium Clothing

(Concluded from page 17)

(the knicker and teddy) that in five or six years ('23 to '28) there was hardly any college or school, outside of the high schools, that had not changed from

Two Styles of Wash Suits for the Gym

middies and bloomers to waists and knickers. Also came the one piece black knicker suit worn with a teddy, as mentioned, and no better looking suit in the mind of the writer ever appeared, nor can appear on the gymnasium floor for teacher or pupil. While it took sixty years to complete the change to bloomers, it took only five years to change from bloomers to knickers.

Another Wash Suit

But the evolution of gymnasium clothing for women had not stopped even there, for the most abrupt, rapid and radical change of all time has taken place within the past two years, and it might be said in truth, during the past year. The dream of the up-to-the-minute progressive teacher of physical education has always been a standard suit, standard and uniform in style and in color. During the years, especially of the middy and bloomer, the girls of many of our colleges and most of our high schools in gym classes wore anything, any kind of outfit, any style, full or scant, long or short, cotton, serge, sateen, or what not. After the adoption of the knicker and waist, the situation as regards uniformity was greatly improved, especially in the colleges, but in the high schools it remained the same. Suddenly the situation was changed. An abrupt change took place. A new idea, starting like a prairie fire simultaneously in several separate localities, spread in no time at all over the whole country.

This idea was colored wash suits for the gym. Discussed and shown at conventions, national, sectional and local, advertised and exhibited by manufacturers, there is hardly a school, public or private, no matter how remote that has not heard of and is not interested in the new wash suits. The dream of the physical director has come true. The gym classes need look no more like Coxey's army marching to Washington but like West Point cadets on parade, and the pride of the students and the morale of the class is thus greatly advanced.

In the profuse and varied offering of the year of material from the mills, the manufacturer who is wise has chosen only a fabric which will not only wear but which will not fade in the necessarily repeated washing. Otherwise, one of the chief purposes in the adoption of the wash suit would thus be wholly defeated.

In these pages I have tried to show the changes in women's clothing and especially the three great changes —the first, so slowly and carefully—the second, in much less time—and the third, with rapidity almost unbelievable.

From that day before the dawn of history, "when Eve was made from Adam's rib" great changes for the better have been made in human lives, but no greater change in all time has taken place than in the lives of women during the past half century of progress, which has found expression in the clothing they wear, and freed them from the bondage of absurd and ridiculous convention.

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Questions and answers designed to teach the rules of the game. Very useful to coaches, players, and officials. Revised in accordance with the recodified 1930 football rules.

Personal Hygiene for Nurses. Seneca Egbert. F. A. Davis Co. $2.50.

Readable and up to date treatment of health. Illustrated. Selected bibliographies. Well adapted for textbook purposes for colleges as well as for Nurses Training Schools.

Individual Gymnastics. Lillian Curtis Drew. Lea and Febiger. 271 p. $2.25.

Revised (fourth) edition of this standard work on corrective and remedial exercises. Contains analysis of abnormal conditions and descriptions of exercises. Well illustrated. Authoritative.

Elementary Tap Dances. Katherine Ferguson. The Womans Press. 22 p. $1.15.

Dances for children four to twelve years. Also good for adult beginners. Has explanation of dance terms and of nine dances arranged in progression.

The Art of Social Dancing. Lawrence A. Hostettler. A. S. Barnes & Co. 140 p. $2.00.

An excellent textbook for the physical education teacher undertaking instruction in ball room dancing. Part I gives fundamental principles; Part II gives commonly used figures and combinations found in waltz, fox trot, one-step and tango. Special directions for leading and following. Author is well known authority.

Elements of the Free Dance. Elizabeth Selden. A. S. Barnes. 163 p. $1.50.

Gives an exposition of the "free dance" without making itself an advocate of any particular form or method. Section I is on the Spirit of Rhythm; II compares the Ballet and the Free Dance; III, "Building Stones," an analysis of movements of body, balance, etc.; IV, graphic dynamics—space, patterns, and planes; V, glossary of terms. An original and stimulating book.

Assemblies for Junior and Senior High Schools. Eileen H. Galvin and M. Eugenia Walker. Professional and Technical Press. 334 p.

Points out the value of an auditorium program as an outgrowth of class or extra-curricular activity. Discussions of values of assembly, results, method and administration, and practical assembly programs. Chapters IX on Physical Education and XIV on Special Activities (i.e., Circus, Folk Dance, Health Plays, Posture, etc.) of particular interest to the physical education teacher.

Nursing in Emergencies. Jacob K. Berman. C. V. Mosby Co. 160 p. $2.25.

Practical facts for nurses who must meet many emergencies while awaiting the physician. Handbook size, large print, many diagrams.

Swimming the American Crawl. John Weissmuller. Houghton-Mifflin Co.

Contains elementary instruction and exercises for beginners, and also rules for advanced speed swimming. Illustrated with strips from movies giving a graphic analysis of the author's stroke. The author also gives a number of the secrets by which he has attained the swimming championship of the world.

The Taylor Health Program. Jeanie M. Pinckney. Extension Division, University of Texas.

An experimental project planned by the Bureau of Nutrition and Health Education at the University of Texas and carried out in a chosen city school system. Statistics and summaries show the results of the experiment. Graded outlines of health lessons by months and weeks.

Boys' Book of Camp Life. Elon Jessup. E. P. Dutton Co. 300 p.

The author has drawn upon long experience to write a very practical book for campers, explorers, and woodsmen. A wealth of material on tents, comforts, footgear, campsites, maps, measuring distances, etc. Thoroughly illustrated. Clear style.

Track and Field for Women and Girls. Alice W. Frymir. A. S. Barnes & Co. 208 p. $2.00.

Needed contribution to the practical literature on track and field for women. Treats technique and methods of training and coaching in all events. Valuable suggestions for squad classifications, mass competition, and the organization of meets. Excellently illustrated.

Tap Dancing. Marjorie Hillas. A. S. Barnes & Co. $1.00.

Has fourteen routines with descriptions and references to appropriate music. Includes composer, publisher, and Victor record number of music selected. Teachers of advanced clogging as well as teachers of tap will find in this cleverly arranged book a means for introducing variety and interest into their work.

Education and the Summer Camp. Lloyd Burgess Sharp. Teachers College, Columbia. No. 390.

Detailed report of plans, methods of organization, and administrative problems of four years' experience in the camps sponsored by the Life's Fresh Air Fund. Educational objectives stated. Considerable emphasis on program for underprivileged children. Points out opportunities for learning process in camp situations. Replete with tables and charts concerning this particular experiment.

A Water Program for Camps. The American National Red Cross.

A most excellent handbook on swimming, life saving, and water sports and games.

Changing Emphases

(Concluded from page 19)

cational system of the country, we must persistently improve our teaching methods. That our aims and objectives are not realized simply by playing the game is obvious. Rich results come only through scientific program making and skillful teaching.

We have in our hands one of the most effective educational tools. What we accomplish in the next decade will depend upon our improved principles and method. We need the scientific approach and the willingness and desire to apply scientific analysis and research to our objectives and our methods. We need a wider knowledge of the field of testing in general and better skill in the accepted educational technique. We need to make our work truly educational in all its phases and then we need to be able to talk with the general educators in their own language so that we may sell to them the value of our contribution to education.

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Standard Texts on Physical Education

Education Through Physical Education

Its Organization and Administration for Girls and Women

By AGNES R. WAYMAN, Associate Professor of Physical Education, Barnard College, Columbia University. *Second Edition.* Octavo, 378 pages.
Published, 1928. *Cloth, $4.00, net*

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12mo, 150 pages, illustrated. Cloth, $1.75, net. Published, 1927

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12mo, 276 pages with 121 engravings. Cloth, $2.25, net. Published, 1929

By LILLIAN CURTIS DREW, Assistant Director, Central School of Hygiene and Physical Education, and Instructor in Corrective and Remedial Gymnastics and Kinesiology.

Dudley Allen Sargent

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Edited by LEDYARD W. SARGENT, with an introduction by R. TAIT McKENZIE, M.D. 12mo, 221 pages with frontispiece. *Cloth, $2.00, net. Published, 1927.*

Normal and Elementary Diagnosis

By WHITELAW REID MORRISON, M.D., Professor of Physical Education, Oberlin College and LAURENCE B. CHENOWETH, M.D., Professor of Hygiene, University of Cincinnati. Octavo, 384 pages with 136 illustrations. *Cloth, $4.00, net. Published, 1928.*

Basketball

A Text-book for Coaches, Players, Recreation Leaders, Students and Teachers of Physical Education

By JAMES G. BLISS, Ph.D., Head of Department of Physical Education, State Teachers' College, West Chester, Pa.; with a foreword by LYNN W. ST. JOHN, Professor of Physical Education, Ohio State University; Chairman, Joint Basketball Rules Committee. 12 mo, 202 pages, illustrated with 72 engravings.
Published, 1929 *Cloth, $2.50, net.*

Physical Education Activities

FOR HIGH SCHOOL GIRLS

By the Staff of the Department of Physical Education for Women, University of Michigan. Octavo, 322 pages with 54 engravings.
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How WE Do It

Tag Football

A Game for Junior High Schools

The Tag Football Rules given below have been used with Junior High School boys under the direction of the men students of our Normal School. After several changes introduced as the game was played these rules have given satisfaction to both players and teachers. We call the game "Tag Football" rather than "Touch" because we found the word touch did not meet with the approval of the boys. The word Tag seems to have more punch in it and we found it wise to apply this bit of boy psychology in making the game popular.

Aims: Provides a game for boys, with plenty of action, with enough of the Rugby game included to satisfy. Rules simplified and speeded up, especially adapted to small areas such as school yards and playgrounds. Boys soon learn the game and can conduct it after school hours.

Equipment: Rugby ball, a field with goal posts, or marker to designate ends of field and side lines.

Officials: Referee and one linesman.

Rules:

1. KICK OFF. Regulation football kick, or punt from center of field.
2. DOWNS AND DISTANCES TO BE GAINED. Must make ten yards to retain possession of ball. (4 Downs).
3. CHARGING AND INTERFERENCE. No player on defense or offence may charge with body or in any way interfere with the player. Legitimate play is similar to block in basketball, with no body contact. Ball is dead when player is tagged in possession of ball.
4. FORWARD PASS. Any number of passes to the down, and they may be forward, lateral or back and made from any position on the field. All players are eligible to receive passes. All passes are complete and are in play with one exception, namely, if the ball is grounded and is not touched by a player, it is brought back. (This rule is necessary to prevent long passes with no attempt for accuracy.) A pass fumbled may be recovered.
5. BALL ACROSS GOAL LINE. Ball grounded across goal line on a pass, punt or missed drop kick shall be put in play on 20 yard line by defending team.
6. FUMBLES. A ball touched and fumbled is in play. Any player may recover same.
7. BALL ACROSS SIDE LINE. Kicked, thrown or carried across, ball goes to other side, 20 yards in field of play and is first down.
8. PUNT, DROP KICK, OR PLACE KICK. May be kicked from scrimmage only when captain of attack team yells "Kick Formation." Ball must be kicked, not passed or carried.
9. PENALTIES. Personal foul—15 yards. Charging, holding, tripping, etc. Technical foul—5 yards. Offside, back talk to official, stalling over 20 seconds on play.
10. TIME OF PLAY. Agreed upon by captains.
11. SCORING. Touchdown—6 points. (No try for goal after touchdown.)

Coaching Notes: At least two balls should be on the field for practice work, when groups are divided for preliminary practice of fundamentals. Teams of equal weight are desirable and should be organized before going upon field. Select leaders to take charge of each team and work the team in perfecting skill in handling ball, kicking and receiving passes and team play.

Explain carefully and demonstrate methods of blocking, different kinds of kicking, passes and how to catch ball without fumbling.

Coach players to assist the referee. Player who tags the ball carrier, should stand on the spot where runner was tagged and raise arm high above head and remain there until official places ball.

The big feature of this game is the passing, rather than the tackling. By opening up the passing feature the game is more open, avoids contact, speeds up the play and provides opportunity for the skilled performer.

The season to use this game is in the Fall after the Soccer season. If your Soccer program has been conducted during September and October, start Tag Football for November and continue until December, when interest naturally turns to Basketball. The training gained in Soccer for leg conditioning combined with the handling of the Rugby ball should give an excellent start for the indoor season, with the boys in the best of physical condition.

This game is valuable as an after school game, to develop play leaders among the boys, also officials for games.

FRANK CROSIER

Supervisor of Physical Education for Men, State Normal School, Fitchburg, Mass.

Eastern Society News

(Concluded from page 28)

the league games are played. Every afternoon between the hours of 4 and 6, these game centers are "hives" of activity. Two games of basket ball are played on each floor each afternoon by boys' teams or three games of volley ball by the girls.

The officials in charge of the hundreds of games that are played during the season are schoolmen selected by the directors of physical education.

The East Stroudsburg State Teachers College has a unique organization in its gym team, which is composed of eight men and eight women. Each number on the program is participated in by all members of the group.

The team is composed of students who are selected for their all-round ability. It is considered the major team of the College.

Maryland

The Playground Athletic League cooperates with the Department of Health and Physical Education of the Baltimore Public Schools in promoting inter-school competition. During the spring of the year, the public schools play playground ball and baseball. There are a total of 124 playground ball teams and 63 baseball teams. Track and field championships are also conducted for senior high schools, junior high and elementary schools.

Inter-school competition is also arranged for the colored public schools of the city. The junior high schools entered five teams in a baseball tournament, while the elementary and junior high schools entered 50 teams in a playground ball tournament. Five track and field meets were conducted for these schools. The meets were classified according to grade, closing with a final City Championship Meet.

The Playground Athletic League also cooperates with the Parochial Schools in conducting track and field championships and a baseball tournament. Twenty-eight schools participated in four baseball leagues.

Those Sunday Schools that wish to observe the laws of amateurism and other rules of eligibility, have come to the Playground Athletic League for participation in a Saturday afternoon league.

The boys of the Maryland High Schools engaged in a statewide high school baseball tournament with 101 different teams participating.

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IT MAY INTEREST YOU TO KNOW

At the 1930 convention of the North American Physical Directors Society of the Y. M. C. A., at Detroit, Michigan, Dr. James H. McCurdy of Springfield, Massachusetts, was signally honored by being presented with the first award of the "Roberts-Gulick Memorial," a beautiful, engraved diploma for outstanding leadership in the profession.

* * *

The American Public Health Association will hold its 59th Annual Meeting at Fort Worth, Texas, October 27th to 30th. Nearly two hundred speakers, among them some of the country's leading health officers, physicians, scientists, sanitary engineers, dieticians, experts in epidemiology, in child and industrial hygiene, public health education and nursing, will address the forty-four sessions which will be held during the four days of the Convention. Other features will be a Texas barbecue and rodeo, inspection trips to local water and sewage disposal plants and hospitals, special trips to other Texas cities, and a nine day tour to Mexico City upon invitation of Mexican public health authorities.

* * *

Mr. W. K. Streit, former director of the Newport, Kentucky, Turner gym, has been appointed director of the Department of Physical Education of the Cincinnati public schools. He succeeds Carl Zeigler, who has retired after heading up the physical education work in Cincinnati for thirty-five years.

Mr. Streit is a graduate of the Normal College of the American Gymnastic Union at Indianapolis. Since then, he has taken advanced work at the University of Cincinnati and Teachers College, Columbia. He has also spent several months in Europe studying the different physical education systems.

At Newport, Mr. Streit showed marked leadership, instituting the Diamond Jubilee Pageant, the Annual Mardi Gras Ball, and other community-wide programs.

In addition to many local civic offices, Mr. Streit is an officer in Phi Epsilon Kappa, national physical education fraternity. He is also a member of Phi Delta Kappa, national honorary education fraternity.

His marked qualities of inspirational leadership were factors in the appointment of Mr. Streit to his new and important position, and he is to be congratulated upon the honor and the opportunity it represents.

* * *

At the Convention of the American Medical Editors' and Authors' Association (assembled at Detroit, Michigan, on June 24, 1930) a resolution was passed urging that steps be taken immediately for the creation of a Portfolio of Public Health in the Cabinet, and that a copy of this resolution be forwarded to the Secretary of State. It was pointed out that the health of its citizens is our Nation's greatest asset and, therefore, Health should be represented along with Labor, Commerce, Agriculture, etc. in the President's Cabinet. This stand has already been endorsed by the American Medical Association.

Armistice Day Material

A REVISION of the folder containing program material suggested for the use of schools in the celebration of Armistice and other patriotic holidays, emphasizing world fellowship and peace in place of rivalry and war, has just been completed by the Women's International League. This source list of poems, stories, prose readings including Bible selections and the speeches of famous men, plays and pageants, dances, songs, and topics for talks or essays, was originally prepared by a group of teachers several years ago and has had wide distribution. It now appears with the addition of much new material and may be obtained (single copies free of charge, two cents apiece in quantity) from the Women's International League for Peace and Freedom, Pennsylvania Branch, 1924 Chestnut Street, Philadelphia.

Folk Dancing

Continued from page 23

2. American.
   a. Ruth St. Denis.
   b. Late—Isadore Duncan.
   c. Doris Humphrey.
   d. Bertha Ochsner.
   e. Ted Shawn.
   f. Martha Graham.
3. Japanese.
   a. Michio Ito.
   b. Madame Karuko Katoyoma, head of the Katoyoma Guild of Dancers of Japan.
4. Argentine.
   a. La Argentine.
5. German.
   a. Harold Kreutzberg.
   b. Yvonne Georgi.
   c. Mary Wigman.
6. Swedish.
   a. Ronny Johansson.
7. Spanish.
   a. La Argentine.
   b. Carola Gaya.

Method:

1. Lectures.
2. Special notes.
3. Personal information from teacher and individuals.
4. Clippings and pictures from notebooks.
5. Advertisements from managers of the dancers and from dance programs.

Student Supplementary Reading:

Readers' Guide. Books written by dancers.
Magazines.

N. Folk Dances Studied.

1. Gustaf's Skoal (Swedish)
2. Tantole (Swedish)
3. Bleking (Swedish)
4. Seven Jumps (Danish)
5. The Crested Hen (Danish)
6. Minuet (French)
7. Russian Snow Storm (Russian)
8. Kamarinskair (Russian)
9. Rufty Tufty (English)
10. Wooden Shoes (Dutch)
11. Csardas (Hungarian)

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A Rental System

(Concluded from page 25)

sium suit fee as Freshmen or Sophomores, $2.50, and for Senior and Graduate students who have not previously paid the fee, $1.25."

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In presenting this information the writer realizes that institutions are not all alike, and that an administrative system successfully operated in one may prove impossible in another, or at least may demand quite a different scheme of procedure for its successful conduct. The plan is presented, however, in the hope that some of the points mentioned may prove valuable to others who are having to meet the same general problems as those existing at the University of California. .

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WELLESLEY COLLEGE, WELLESLEY, MASS.

The New Physical Education in Germany (*Continued from Page 9*)

tions, and thirty-nine decided against it. The comments of the parents, "looks healthier," "has a better appetite," "posture is better," "has become less subject to sickness," indicate that the plan perhaps succeeded in ways hard to measure objectively.

All who were connected with the experiment in Halle and Berlin — school doctors, University professors in charge of the mental tests in Halle, school principals, and physical directors, state that an observable difference in the children was apparent and declared themselves in favor of continuing the plan of having a daily period of physical education for each child.

Public Stadiums and Play Fields

PLAY fields, to which youth and adult go to exercise, play games, or dance, have always been an integral part of German physical education. They still are much in evidence. Recently, however, a more spectacular sport place has arisen, the Stadium. Here are facilities—and the type of facilities—to satisfy the most exacting swimmer, track man, motor or bicycle racer, tennis player, soccer player, or gymnast. It is in many ways the Utopia of Sportland.

The Stadiums are municipal projects. Many were built to solve in part the terrific post-war unemployment problem. They are huge in extent (one hundred to two hundred acres), and carefully and pleasingly laid out. Entrance to them is free, while a very moderate sum (approximately forty cents per month) permits the use of most facilities. Abstracts from a pamphlet issued by the Stadium at Frankfort am Main will give an idea of one stadium.

"The main entrance of the Frankfort Stadion forms the point of a large triangle enclosing an area of 42 hectares (104 English acres).

"The main entrance of the Frankfort Stadion forms the medical department, ambulance stations, the offices of the Administration of the Stadion Company, rooms for those taking part in courses, and a Lecture Hall....

...Immediately before us lies the great Arena with tiers rising around it, large enough to accommodate 40,000 spectators. The running track, 500 m. long and 7.50 m. wide, goes round the playground with its sandpits for jumping and weight-putting arranged in the curves. There is, in addition, a special track, 8 m. wide, for the 100 m. course. ...The central block of the grandstands represents an ancient Greek Theater. ... Thus this part of the Stadion not only serves for sporting events but also for dramatic and musical performances of a festive character and thereby expresses in a very striking manner the ideal connections of our modern gymnastics with those of antiquity. The main building is 120 m. long, and the central part rises to a height of 18 m....

...This building (the gymnasium), the headquarters of the coaching and practicing department, enables gymnastics, etc., to be carried out successfully all the year around by making them independent of weather and seasons. Its length is 50 m., its width 25 m., its height, 12 m. The gallery leading around it is used in winter as a running track. Its floor is covered with cork linoleum. The parquet-floor in the center of the Hall is the size of a tennis court. A pit of 19 by 11 meters filled in with saw dust enables jumpers, weight-putters, and gymnasts to train at any time. Side buildings contain dressing rooms, shower baths, baths and rooms for implements of all kinds. There are also special departments for the medical supervision of sportsmen and for artificial sunlight treatment to make up for the lack of sunshine in winter time. The so-called Stadion courses go on continuously all the year round. Anybody can join them for a small fee at the hours fixed by the general time table. In these courses instruction in physical training, gymnastics, in games and sports is given by approved teachers. Those taking part in these courses are admitted to free consultations by a specially appointed "Sport" physician. Hot baths and showers are available after exercise. The effects of the training can be heightened by massage and artificial-sunlight treatment of different kinds.

In front of the gymnasium there is a playground surrounded by a 400 m. track, which is solely used for training purposes.

On our return we pass, on the left, the little Open-Air Theater which, in its intimate seclusion amidst beautiful surroundings, is not used for purposes of sport but serves for art, education and religion. It holds 1200 people. A bell hung in an oak tree calls to divine services.

The 15 Tennis Courts, 12 hard courts with entoutcas-floors and 2 lawns, are grouped around a central court the terraces of which hold 2500 spectators. Playing upon these courts does not depend upon membership in any Club or Society, but anyone can hire a court by the hour or for the whole season. The little cafe in front of the central court is also open to visitors. The building also contains dressing and bath rooms.

The Cycling Track of 400 m. is constructed for racing cyclists as well as for cyclists behind pacemakers and for motor-cycling races. The track is divided into two parts. The inner track 4 m. wide and less steep, is for racing cyclists and the outer one, 6 m. wide and banked at its steepest part ot an angle of 49 degrees, is the track for cyclists behind pacemakers. ... The inner square serves for ball games on cycles, show cycling, boxing matches, etc. ... The building forming the grandstand contains also a restaurant and ... like the main building ... lodgings for persons coming from other places to take part in the special Stadion courses. ... The Velodrom...has room for at least 20,000 spectators. ...

...To the right lies the Swimming Pool, 100 m. long by 22 m. broad, and the diving pool which is 18 m. long. In a swimming contest the competitors start from the 8 numbered blocks on the bridge which separates the swimming pool from the diving pool. Diving is practiced from five different heights, i.e., from 1, 3, 5, 7, and 10 meters. The depth of the diving pool is 4.70 m., and that of the swimming pool from 1.80 m. to 2.50 m. Both pools together hold 7600 cubic meters of water, coming from a pumping station situated in the neighboring municipal forest. The water is renewed continuously and mechanically filtered. According to the weather the water is warmed up to an average of 20 to 21 degrees Celsius by letting in surplus steam from the pumping station. Below the water line, there is a row of electric lights, like the bull's eyes of ships, by means of which the water can be lighted up from below. The terraces rising on the right hold 6,000 spectators.

The Pool for non-swimmers in the sun—and air—baths begins with a depth of only 30 centimeters which increases to 1.20 m. in the center. Here children and non-swimmers can disport themselves without the least danger. For the smaller children there is a sand pit. On the opposite side of the wood path, embedded among high trees, is a play ground for the use of the bathers only and connected by a bridge with the baths. Everything is provided for the comfort of the guests. There are hairdresser's shops and a massage establishment for both ladies and gentlemen. Daily and sporting papers and other reading matter are obtainable. Comfortable easy chairs on the roof are at everyone's disposal, free of charge. Refreshments of every kind

can be had at the Restaurant near by where the visitor can enjoy the good fare provided and rest from his exertions.

Finally there is, ... within the wood, a Dancing Meadow with play grounds which is especially suited for the holding of fetes by Schools and Societies.

For the administration of the Stadion a company has been formed the shares of which are entirely in the hands of the Municipality."

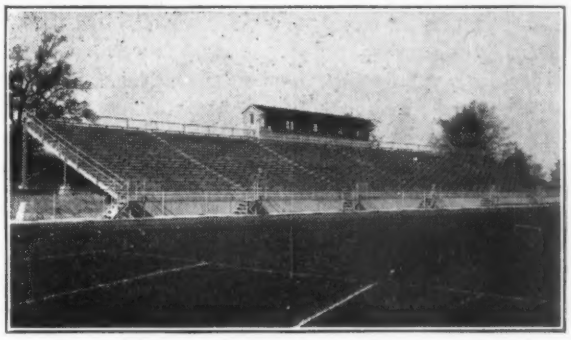
There is little to add to this description except that the equipment is superb and the multitude of trees, the shrubbery, and the wide expanses of green lawn give to the whole an appearance of a well-kept park. Perhaps special attention might be called to the provision for lodging, in the Stadium, people desiring to take a full course of gymnastics, or athletes wishing to enter a period of training before competing in sectional, national, or international meets.

One objection to the Stadium, as to any centralization of public-used facilities, is the time necessary to reach it from certain portions of the city. This is particularly true when, owing to the vastness of the Stadium, it cannot be centrally located but must be situated in some appropriate part of the outskirts of the town. In this respect the smaller play fields located in various sections of the city are better. Such small, well-equipped play fields are under consideration in several cities.

Wandering and the Youth Shelters

A PHYSICAL exercise seemingly practiced by every German sometime during the year is hiking—or wandering, for it is truly wandering, a leisurely visit to this or that spot wherever inclination prompts one to go. When one sees groups of youngsters crowding the railroad stations, older boys and girls filling the Youth Shelters, and meets an elderly couple, flower-crowned, sticks in hand, at the foot of the Zugspitze, then one can suspect that the "Wanderlust" is enticing young and old out of the city and into the country. Penetrating into the schools it has secured for the younger boys and girls the Wander-day, a day taken bodily out of school time and given over to rambling over the neighboring countryside. For the young people in industry there exist numberless Young People's Associations which no matter what their purpose for union—music, gymnastics, bicycling, politics, etc.—all have wandering as a common activity. The number who get out into the open for walking tours of a day or more at various times during the year is consequently very large. From observations in the railroad stations, from the car windows, at the Youth Shelters, on the rivers, etc., one would say that the whole nation was "Wandering." The Youth Shelters, for the year 1928, reported over 3,000,000 "overnighters." To this figure must be added those who take countless one-day trips on Sundays, and the number who camp out overnight when the weather permits.

A great aid to the growth of the wander movement has been the establishment of *Jugendherbergen,* or Youth Shelters, throughout Germany. "The existing German Jugendherbergen are to be found under such roofs as schools and other public buildings, gymnasiums, clubhouses, homes, barns, hospices, ancient city



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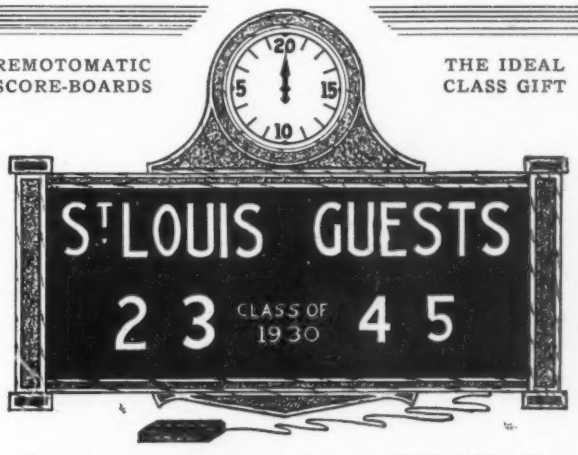

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towers, castles, unused factory rooms, peasant homes, sanitariums, monasteries as well as in their own buildings. Hotels are avoided as much as possible, though the present building scarcity renders them almost indispensable. Every Jugendherbergen has at least two separate sleeping sections, one for each sex. Large Jugendherbergen not infrequently contain numbers of smaller bedrooms. Sleeping equipment consists of cots, or wooden frames covered with straw sacks or mattresses and wool blankets. In a great number of Herbergen of the temporary kind the sleeper must lie on the floor with straw as bedding. Many Jugendherbergen contain a social room with homey furnishings, a kitchen with cooking and washing fixtures, a library, frequently a shower room—if not, a nearby pond in the open serves as well—a field for dancing, playing or sport on the grounds.[17]

Summary

THE program of physical education in Germany is still in a period of transition. Strict formality has given way to a more liberal program in which sports and games occupy the central position.

The change has taken place in a comparatively short period of time. Several desirable things in our own program of physical education, such as the development of student leaders, and opportunity for students to select their activity from among those offered by the school, may develop in the German program in coming years. On the other hand, Germany offers for consideration by American physical educators the requirement that teachers of physical education pass the examination for teacher's certificate in at least one other branch of education, the lack of intense athletic competition between schools, and the "Wander-day."

[17] "Leisure and Education in Germany" p. 87. Compiled by the Reichsausschus der Deutsche Jugendverbande and by the Zentralinstitute fur Erziehung und Unterricht, Berlin.

The November, 1925, issue of the "American Physical Education Review" contains "Mat Exercises and Tumbling," by J. H. McCurdy, and "Work-a-day Tests of Good Posture," as well as other helpful articles. Those who have not read these articles can obtain copies of the "Review" from the American Physical Education Association, Box 362, Ann Arbor, Mich.

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Correspondence.
Visits to twenty-six German cities.

A Four Year Program

(Continued from page 21)

B. Winter. Winter tournaments, (basketball), swimming pageants, individual athletic meets, boxing and wrestling tournaments, gymnastic demonstrations, class parties as social contacts.
C. Spring. Field days, May days, play days, circuses, badge tests and track and field meets.
D. Activities that carry through the entire year such as the related activities, boy and girl Scouts, Four-H clubs and Athletic Associations, may be used as either an after school activity or special seasonal event. They should not, however, be substituted for both.

To justify the granting of high school graduation and college entrance credit, let me take you hurriedly through the four year program based upon the Illinois situation and law requiring physiology and hygiene called "Health Instruction." During your freshman and sophomore years, therefore, you will take the required class room work as outlined under I, plus any one of the after-school activities for each season as outlined under II and take part in at least one special seasonal event as outlined under III.

The program for the junior and senior years is based upon the addition of an eighth cardinal principle: *Leadership*. It is my belief that physical education opens the most avenues for positive student leadership. Therefore, during your junior and senior years you will be required to take theory for one period a week and practice for the other. In your junior year, you will receive as one hour of theory, instruction which will prepare you as squad leaders for the freshman and sophomore class work and as minor officials for intramural and after school activities, and special events. Your other

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hour will be practical work which will take you either into the class work as demonstration leaders or onto the playgrounds as pit diggers, measurers, hurdle setters and ball chasers for athletic events; stage hands, janitors, ushers, messengers and roustabouts for tournaments, carnivals, demonstrations, circuses and field days. You would also be expected to apply your practical period in the after-school activities of the upper elementary grades in performing the duties prescribed for your class.

During your senior year, you will have elevated yourself to the dignity of which your class entitles you and you will receive as one hour of theory, instruction which will prepare you as instructors in the class activities. Your other hour will be practical work which will take you into the class work as assistants to the director (under his direct supervision), into the swimming pool as life guards, time keepers for athletic events, and right hand men, ring masters, committeemen, ticket sellers, door men and announcers for carnivals, tournaments, demonstrations, circuses and field days.

Summarizing briefly, you will be required to take class work two periods a week and hygiene as health instruction for one period a week for four years; you will be required to take part in at least one after-school activity for each of the three seasons and to take part in at least one special seasonal event. Although several of the fall activities may also be listed for the spring, you will not be permitted to duplicate your seasonal choice. You may take part in more than one after-school activity and more than one seasonal event, but these must be without duplication. Regardless of your class, your ability, or activity, you will be under the direct supervision of a teacher and responsible to the physical director. The teachers for this supervision may be selected from the academic staff, since most high school teachers have had physical education courses in normal schools, colleges or universities and have a working knowledge of after-school activities.

I am not offering this brief outline for acceptance or rejection, but to submit it as a guide in making out a suitable program that is worthy of high school graduation and university entrance credit.

If necessary to increase the day by adding an extra hour in order to add a period for after-school activities, it would be justifiable to do so; this would also provide time for other extra-curricular activities. This would not be a new idea, as Foster says that the school day begins when the child starts to school and ends when he puts his books away for the night. Some educators advocate the lengthening of the school day. Superintendent Boynton of Ithaca at the recent meeting of the N. E. A. stated that home study is a failure and favors lengthening the school day of children of laboring parents to equal that of the parent's working day.

Superintendent Broome at the N. E. A. meeting at Atlantic City made the statement that in his Philadelphia schools the per capita cost of Latin was $25.00 and only $5.00 for physical education. If we accepted this as a general ratio, we could by equalizing these costs have a broader intramural and minor sports program.

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School Health Education (*Continued from Page 14*)

Special Classes

No school health education program is complete unless provision is made for the education of children whose physical or mental condition is such that they cannot profit from the work of the regular school classes. Special classes are formed for the care of these children so that their school work may be adapted to their physical or mental condition. These special classes enable many handicapped children to become happy, self-supporting individuals. Special classes are frequently formed for children with inferior intelligence, extremely poor vision, markedly impaired hearing, the crippled child, the child with heart disease, and those with incipient tuberculosis, exposed to tuberculosis or showing severe malnutrition.

These special classes do a great deal of good, but care must be taken to see that damage is not done to the mental health of the child while he is being helped physically. These children must know their physical limitations but they must also know of the possibilities they have for the development of special skills. They must be encouraged to reach the highest standard of health, physical and mental, which their condition will permit. Care must be taken to prevent these children developing feelings of inferiority.

Mental Hygiene

During the last decade much progress has been made in extending our knowledge of mental health and mental hygiene. The great need for this work is recognized when it is understood that there are as many people in our hospitals for the mentally sick as in all other hospitals combined. The fact that the basis for some of our crime in adults and delinquency in children is poor mental health gives added impetus to activities of this nature. It is also realized that there are many people not suffering with definite mental disease, but still with such poor mental health that they work very inefficiently and do not get the happiness and satisfaction from life that they should.

What can the school do to prevent mental disease and to develop mental health in children? In my opinion the mental hygiene work of the schools should be developed along two lines. (1) Every teacher in an elementary school or high school should have a thorough understanding of mental health, child behavior and the principles of child guidance. This is essential in order that a teacher may conduct her class and present her material in a way that is conducive to the mental health of her pupils. It is the teacher's responsibility to see that the environment of the child while he is in school is one that is conducive to mental health, and that none of the experiences of the child at school exert a detrimental effect on mental health. The attitude of the teacher toward the child and his work is of tremendous importance from this angle. (2) Expert consultants in mental health should be available for every school to study and recommend treatment for the care of children showing signs of beginning mental maladjustment. These expert consultants would be psychiatrists or psychiatric social workers. Children who show inability to do work according to their intelligence or who exhibit anti-social behavior should be referred to these mental health experts. Valuable preventive work can be done with kindergarten children whose behavior indicates to the psychiatrist that the child is not adjusting itself to his home or school environment. Children who exhibit temper tantrums, finicky eating habits, masturbation, shyness, nail biting and thumb sucking are types of children who should be referred for this preventive mental hygiene work.

Hygienic Arrangement of the School Program

The hygienic arrangement of the school program is a part of school health education to which too little attention has been given. The length of the school day, the length of class periods, the time of recess periods and their duration, the sequence in which various subjects are presented in the daily program, the distribution and length of various vacation periods are all factors which have a bearing upon the child's health and

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physical condition. In all school systems it would be desirable to study the arrangement of the school program to see whether any changes could be made to decrease the possibility of fatigue with its resultant irritation, lowered vitality and lowered ability to learn.

The present arrangement of most school programs is based on tradition. The time will come when the program will be arranged with due regard to its effect upon the health of the child and the relation of his well-being to his ability to learn.

Following this incomplete outline of arbitrarily made subdivisions of school health education, let me express several ideas in regard to the administration of the health part of the school program.

Relationship of the Superintendent of Schools and the Board of Education to School Health Education. The Superintendent of Schools is the highest administrative official in a public school system. One of his duties is to direct the policies of the school system and to see that the work of the schools is directed toward reaching the objectives which are desired. Health is generally recognized as a desirable objective of education. Consequently, it is the duty of a Superintendent of Schools to see that time is allotted in the school program for the various parts of school health education. He should endeavor to educate all administrative officials under him to the fact that health is an objective of education in practice as well as in theory.

In determining the success of principals, every school-superintendent should consider the principal's efforts to reach the objective of healthy children as well as the other objectives of school education. Superintendents need expert advice and expert workers in regard to school health education and it is a function of the Board of Education to supply the Superintendent with a corps of such professional workers and advisors. The Board of Education must appropriate funds for these workers and for the sanitary requirements of the school buildings.

The School Principal and Health Education. The principal is the chief administrative official of a school. As such his leadership is a vital factor in the development of the health activities at his school. As a Superintendent marks the success of a principal, so should a principal mark the success of his teachers, i. e., by a consideration of the effort and success of a teacher in reaching the objectives of education, including health as one of these objectives. As this is done, progress will be made in making our educational practice coincide with out educational theory.

The Teacher and Health Education. The classroom teacher is the most important person in school health education. Unfortunately, some of our present teachers are unprepared for their part in this work. These unprepared teachers should be assisted by supervisors, nurses, physicians, and mental hygiene workers until they are able to take care of the health work which should be done by them. As our normal schools give more attention to the preparation of teachers for health education, the standard of such work will be raised. It is essential that each teacher recognize that the health of her pupils is one of her biggest responsibilities. This idea was expressed by Edwin C. Broome, Superintendent of Schools in Philadelphia, when in an address on "Administration of the Health, Physical Education and Recreation Program," he said, "One of the most important, but difficult problems in the administration of a program of physical and health education is that of convincing all the teachers that the physical and health program is a vital part of the educational plan, and not an appendage; that it is not only as important as any other subject of the curriculum, but is more important than any other subject of the curriculum, and should receive more time, and as skillful treatment. If it should ever become my good fortune to build a curriculum for a school system of a newly organized community, a systematic program of physical and health education would be the center of the curriculum around which the rest would be built."

Physicians, Nurses, Psychiatrists, Special Teachers, and Supervisors, and Their Relation to School Health Education. Professionally prepared health specialists are essential in any school health program, but it should not be expected that these health specialists do all of the school health work. In fact, the amount of health work which they do should be but a small fraction of the total. The work of these health experts should be two-fold. (1) They should advise and help superintendents, principals and teachers in planning projects for the promotion of child health. (2) They

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should conduct those parts of the health program which cannot be conducted by regular teachers, but should always be ready to turn over to regular teachers all activities which the teachers become capable of doing. To illustrate, it used to be thought necessary for a nurse to weigh and measure children. Now in most schools this is done by the regular teacher. In many schools vision testing is conducted by the school nurse. With a little instruction and help for the first few times, every teacher could be taught to do the testing. This should be done, thus leaving the nurse free to do things which the teacher cannot. The teacher should do all the health work which she is qualified and trained to do, the nurse, physician, psychiatrist and special supervisors spending their time in raising the standard of work done by teachers and in doing things which teachers cannot do.

School health education is a broad program of activities, the carrying out of which requires the interest, time and effort of everyone connected with the school system—the Board of Education, the superintendent, principals, supervisors, teachers, janitors, special teachers, and health specialists. The intelligent cooperation of all these people makes it possible to plan experiences for a child which will exert a favorable influence on the child's health, present or future, physical or mental, or on his attitudes toward or his knowledge of personal and community health. That is school health education.

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Soccer Questions

(Concluded from page 29)

2. A goal kick is (1) kicking the ball at the goal from the penalty kick mark (2) kicking the ball from the goal line into the field of play (3) kicking the ball from the 6 yard line opposite the point where the ball left the field of play.
3. A goal may be scored (1) by a free kick given for tripping by a defender (2) by an attacker carrying the ball across the goal line (3) by a free kick awarded for carrying the ball by the goal keeper.
4. During the penalty kick (1) all players should be outside of the penalty area except the kicker and the defending goal keeper (2) all defenders should be behind the goal line (3) half backs should mark their opposing forwards in the usual way.
5. At the corner kick (1) all defense players must be behind the goal line (2) all opponents must be 6 yards away until the ball is kicked (3) attacking players must stay outside penalty area.

Completion

1. If a goal keeper handles the ball outside the penalty area .....is awarded.
2. If during a penalty kick, a player comes into the penalty area before the ball is kicked, the decision would be.....
3. The penalty for carrying by the goal keeper is.....
4. A player is off side if she is:
   a. .....
   b. .....
   c. .....
   d. .....or.....
5. In a penalty kick the ball shall not be again played by the kicker until.....

Answers to Soccer Questions

True-False Tests

1. True	6. False	11. True	16. True	21. True
2. False	7. True	12. True	17. False	22. False
3. True	8. True	13. True	18. False	23. False
4. False	9. False	14. True	19. False	24. True
5. False	10. False	15. False	20. False	25. True

Multiple Choice

1. (2) 2. (3) 3. (1) 4. (1) 5. (2)

Scouting and the Schools

(Concluded from page 11)

reation be the leaders in this crusade, or must it come from other sources?

The situation cannot be met by any small, trivial efforts. It is a major task which demands major plans.

There must be community mindedness, the social spirit, the ability to cooperate in a large and magnanimous way.

The school and all social agencies must throw together their resources. The leaders must think spaciously and act magnanimously. It demands executive and wise leadership.

We may take one of two attitudes toward the situation which confronts us. We may say with Hamlet "the times are out of joint, oh wretched spite that I was born to set it right," or we may square our shoulders with Rupert Brooks and say "God be thanked who has matched us for this hour."